

Vol. X, No. 11

November, 1934

SOAP

SOAPS • CLEANSERS • INSECTICIDES • DISINFECTANTS
POLISHES • EXTERMINATING • SANITARY SUPPLIES

UNCO SIMILE

LAVENDER



"Where You Now Use Oil Lavender Fleurs
Try Unco Simile Lavender"

A GENUINE shortage exists in Oil Lavender Fleurs this year. Indications are that this condition will continue indefinitely, with resulting higher prices.

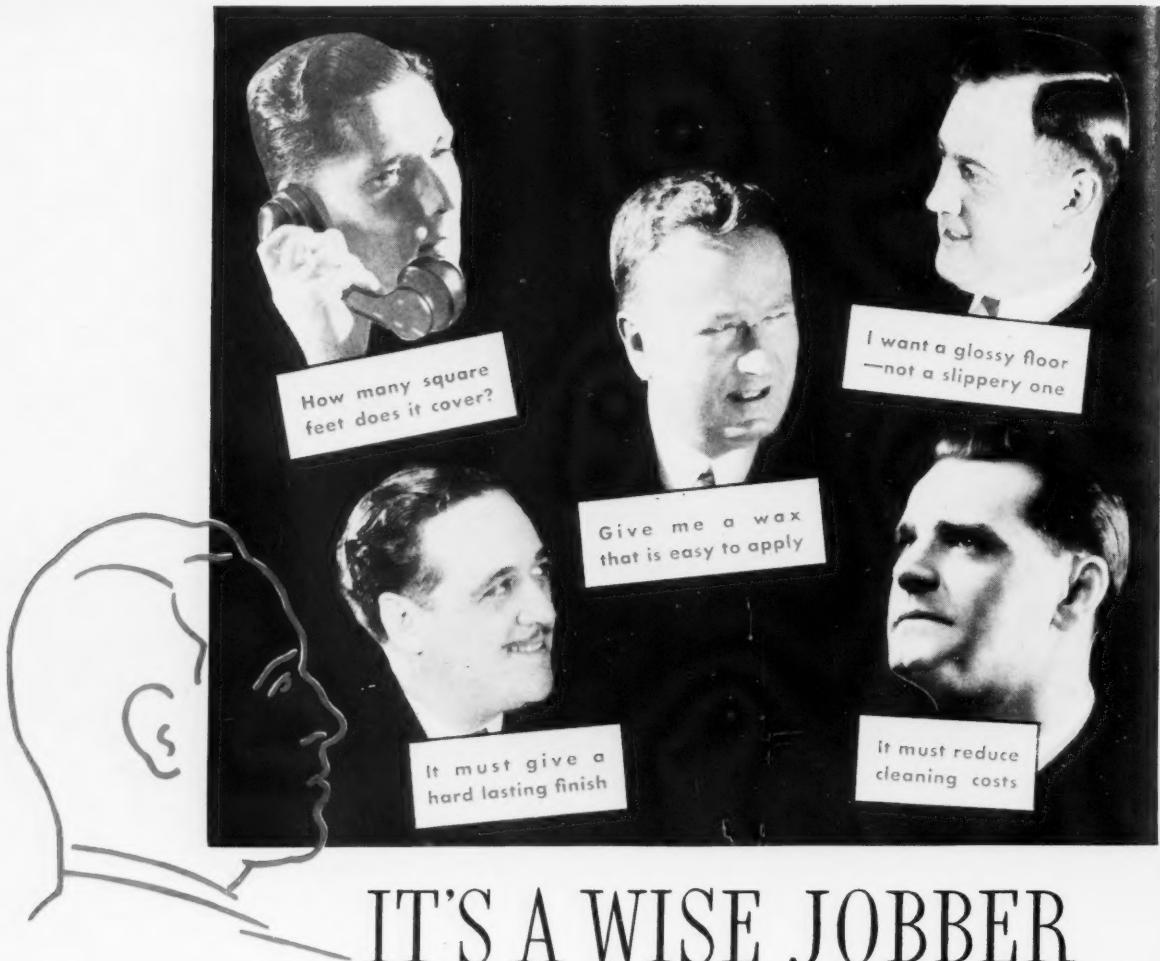
UNCO Simile Lavender is the ideal odor for Soaps. It is cheaper than Oil Lavender Fleurs U.S.P., and is not subject to price fluctuations. In addition, you are assured of a greater odor value and stability by its use.

\$2.75 per pound

UNGERER & CO.

13-15 West 20th St.

New York



IT'S A WISE JOBBER WHO KNOWS HIS CUSTOMER'S PROBLEMS

These Falcon Liquid Floor Waxes solve any waxing problem your customer may be troubled with. Judged on wax content or cost—put to any test of durability, coverage or appearance, they readily prove their superiority.

FALCON LIQUID FLOOR WAX

This solvent wax spreads easily, dries quickly and polishes brilliantly. It produces a hard, wear-resisting, non-slippery surface that is difficult to mar and easy to keep clean. Very economical, for it requires rewaxing only once or twice a year.

If you aren't selling Falcon Liquid Floor Waxes—begin now. Your customers will welcome them and they will build business for you faster than any other waxes made.

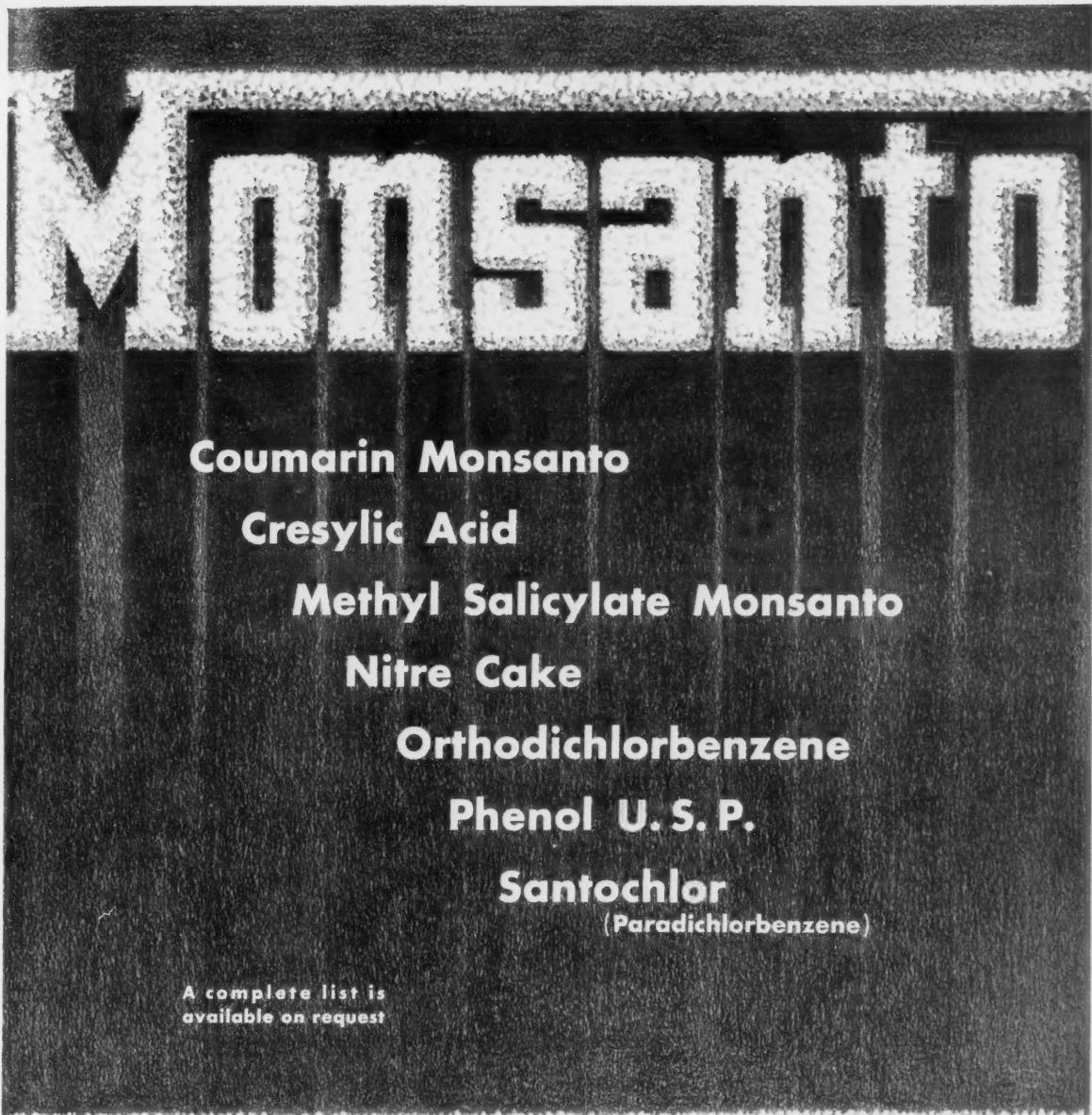
FALCON NON-BUFFING WAX

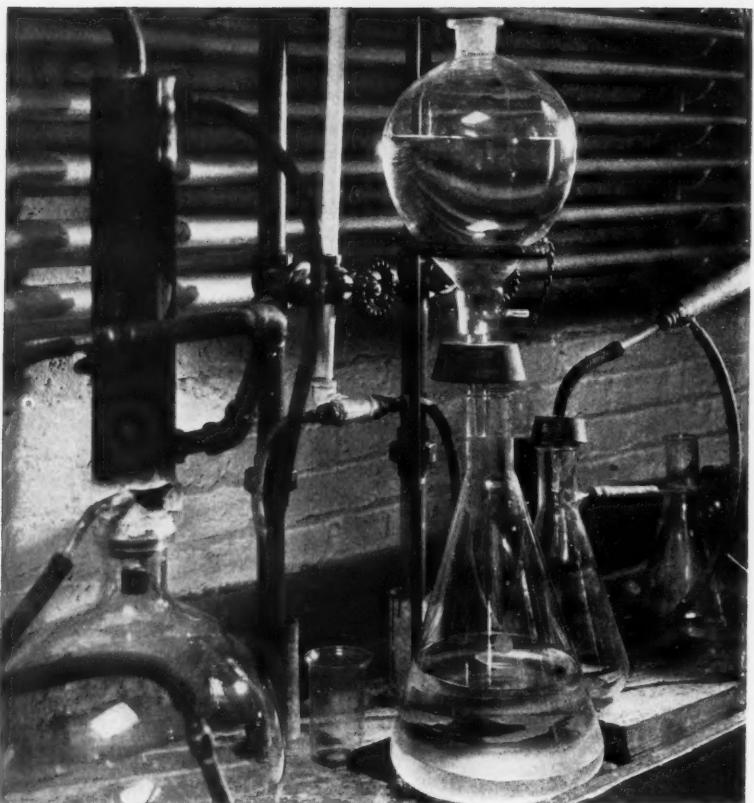
This new wax cannot injure any floor because it is strictly a water wax containing no solvent whatsoever. It covers an amazing area per gallon, dries quickly with a real sheen, needs no polishing, and so cuts floor maintenance costs 50%.

EAGLE SOAP CORPORATION

HUNTINGTON, INDIANA

FALCON LIQUID FLOOR WAXES





CREATIONS vs. COMMODITIES — which wins?

TURN
TO PAGE
11

This Verley process...
upon the Rhodinol to obtain a certain freshness in place...
It seems to impart a medium of any...
achieve through a composition in place...
An absolute organic product, it has a chemical...
body and odor equal to the natural Nerol ex-
isting in small quantities in the Oil of Orange.
Flowers and Neroli, and found in large propor-
tions (10%) in the natural "Provence Rose."

Nerol "S"
Nerol for soap, produced by a new process de-
veloped by Albert Verley, Inc., at a price per-
mitting its free use in soap compositions per-
formerly available only at a price prohibitive
except for the most expensive perfume prod-
ucts. Nerol is now within the means of soap-
makers. Rose or Neroli compositions. This new
Verley product is a true Nerol. It
is stable and will not cause discoloration.

2.20
e 20.00
An-
ange

ABOUT NOTICE • SUBJECT
ADS AND CONTRACTS 11

4.00

• MAIL THE COUPON

for your copy of the new Verley price book, together with samples of items that may be of interest.



ALBERT VERLEY, INC.
11 E. Austin Ave., Chicago, Ill.

Send free copy of the
new Verley Price Book.

Name Position

Company

Address

SOAP

Reg. U. S. Patent Office

Volume X
Number 11

November, 1934

Contents



SANITARY Products Section, which is included as a department of every issue of SOAP, begins on page 67. Production Section begins on page 55.



- Soap Manufacture—What Progress Since 1870? 17
- Naphthenic Acid Soaps..... 21
By Dudley J. Bachrach
- What Retail Price? 25
- A Soap Pioneer 27
By H. L. Zimmer
- Notes on Cold Soap Manufacture..... 55
By Ralph H. Auch
- Termites and Their Control..... 83
By Dr. F. E. Cislak
- New Insecticide, Germicide and Disinfectant Patents 89
By Dr. R. C. Roark
- Personal and Impersonal..... 35
- Contracts Awarded..... 43
- Records of Trademarks..... 49
- New Patents 41
- Market Reports 43-47
- Current Raw Material Prices..... 49-50
- Products and Processes..... 61

«

Published monthly on the 15th by

MacNAIR-DORLAND COMPANY, INC.
136 LIBERTY STREET
NEW YORK, N. Y.

Subscription rate \$3.00 per year. Foreign, except Canada, \$4.00. Canadian, \$5.00. Copy closing dates—7th of month of issue for reading matter and 25th of month preceding month of issue for display advertising. Entered as second-class matter, April 11, 1931, at Post Office, New York, under act of March 3, 1879. Mail circulation, October, 1934, issue 2,983 copies. Total distribution, 3,200.

CARBON TETRACHLORIDE MERCK



*Other Important
Merck Products*

+

CHLOROPHYLL
METHYL SALICYLATE
BENZIN
SODIUM HYDROXIDE
CHLOROFORM
ETHER
BETANAPHTHOL
DISINFECTANTS

Clear, colorless, and free from suspended solid material. Guaranteed purity 99.9 per cent. Non-inflammable and non-explosive in either liquid or vapor state.

This product is used as a dry-cleaning agent; as a spot remover; as a solvent for removing grease, wax, chewing gum, etc. from floors, carpets and upholstered furniture; as a vehicle for stove and shoe polishes; for de-greasing and cleaning machinery, leather, etc.; in paint and varnish removers and in rubber cement; and for killing moth and insect life.

Write us regarding your manufacturing problems and requirements.

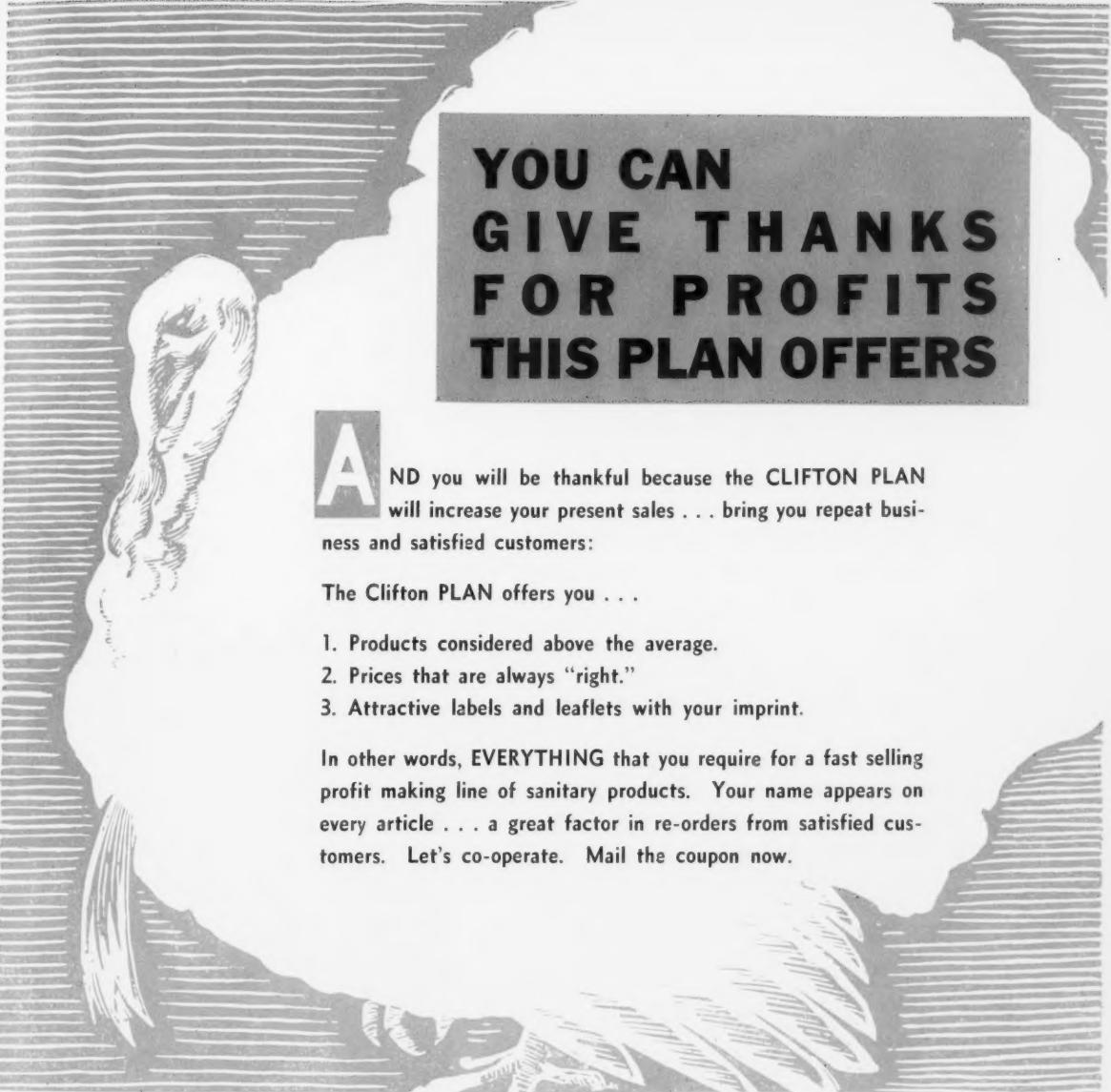
MERCK & CO. Inc. *Manufacturing Chemists* RAHWAY, N. J.

NEW YORK

PHILADELPHIA

ST. LOUIS

IN CANADA: MERCK & CO. LTD., MONTREAL AND TORONTO



YOU CAN GIVE THANKS FOR PROFITS THIS PLAN OFFERS

A

ND you will be thankful because the CLIFTON PLAN will increase your present sales . . . bring you repeat business and satisfied customers:

The Clifton PLAN offers you . . .

1. Products considered above the average.
2. Prices that are always "right."
3. Attractive labels and leaflets with your imprint.

In other words, EVERYTHING that you require for a fast selling profit making line of sanitary products. Your name appears on every article . . . a great factor in re-orders from satisfied customers. Let's co-operate. Mail the coupon now.

CLIFTON CHEMICAL CO. 246 Front St., N. Y.

TEAR OFF HERE

CLIFTON CHEMICAL CO., INC.
246 Front Street, New York City.

It's worth a try. . . . The items checked would probably help increase our sales. Please quote:

- | | | |
|---|---|--|
| <input type="checkbox"/> Semi-Castile Liquid Soap | <input type="checkbox"/> Deodorizing Cakes | <input type="checkbox"/> Rubless Wax |
| <input type="checkbox"/> Foamwel Liquid Soap | <input type="checkbox"/> Deodorizing Blocks | <input type="checkbox"/> Furniture Cream |
| <input type="checkbox"/> Liquid Soap Base | <input type="checkbox"/> Deodorizing Sprinklets | <input type="checkbox"/> Insect Killer |
| <input type="checkbox"/> Liquid Soap Dispensers | <input type="checkbox"/> Wall Containers | <input type="checkbox"/> Coal Tar Disinfectant |
| <input type="checkbox"/> Cresolene Disinfectant | <input type="checkbox"/> Metal Polish | <input type="checkbox"/> Pine Disinfectant |
| <input type="checkbox"/> Liquid Floor Oil | <input type="checkbox"/> Spot Remover | <input type="checkbox"/> Theatre Spray |
| <input type="checkbox"/> Pine Scrub | <input type="checkbox"/> Moth Frost | <input type="checkbox"/> Shampoo Liquid and Base |

(NAME)

(ADDRESS)

Free Flowing

GRASSELLI TRI-SODIUM PHOSPHATE

As our process permits GRASSELLI Tri-Sodium Phosphate to cure, it is FREE FLOWING.

Non-Sifting Packages. Shipped to you in barrels with paper liner—no loss either in transit or storage. Also comes in kegs and bags. Grades . . . fines, medium, coarse, flake and globular.

Let us figure on your T. S. P. requirements. If you are in a hurry, call up our nearest branch. Write for folder.

Let Us Also Quote You On

Silicate of Soda	Carbon Tetrachloride
Caustic Soda	Paradichlorobenzene
Soda Ash	Sodium Fluoride



THE GRASSELLI CHEMICAL COMPANY

FOUNDED 1839

INCORPORATED

CLEVELAND, OHIO

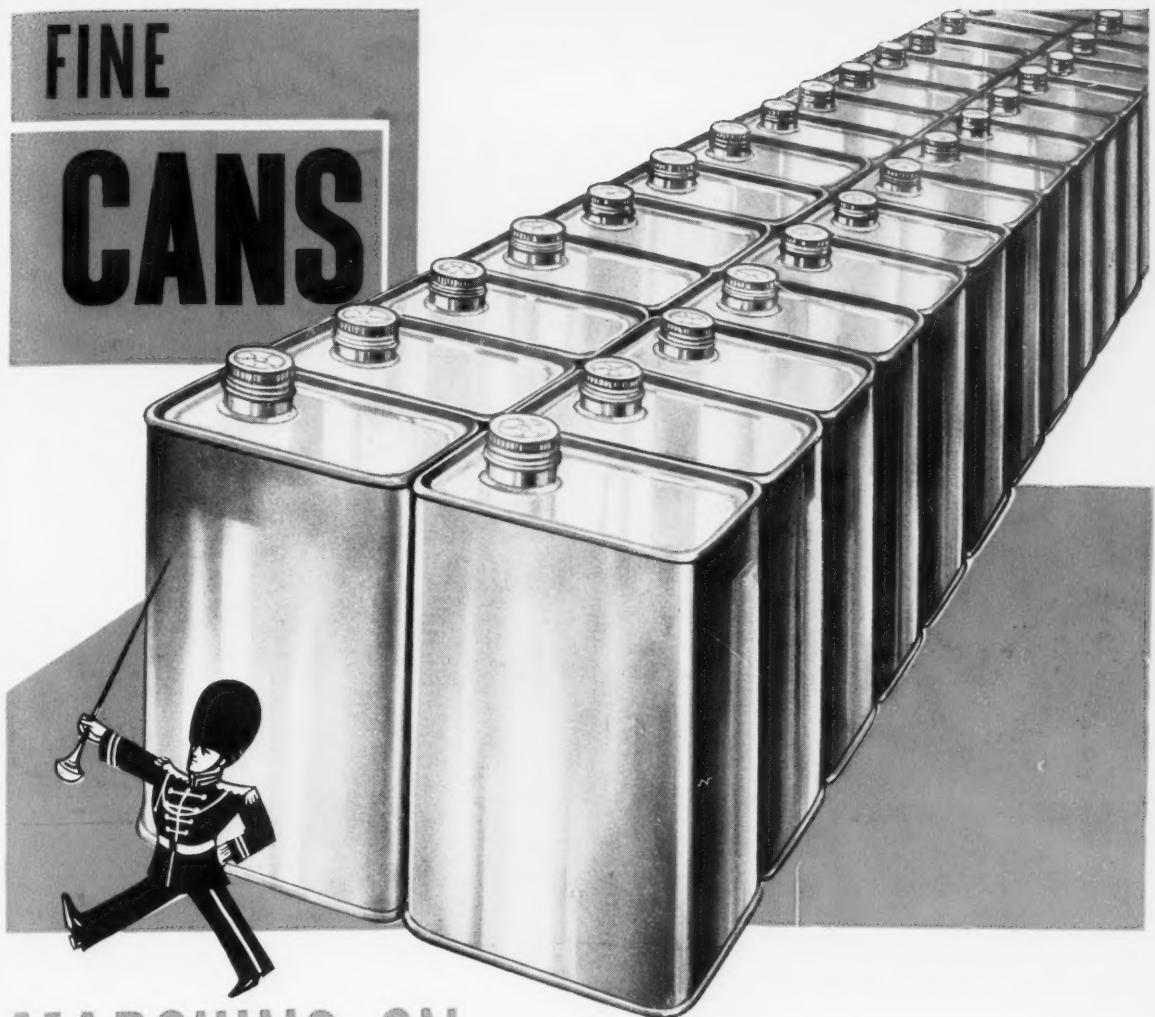
New York Office and Export Office: 350 Fifth Avenue

Albany Birmingham Boston Charlotte Chicago
Cincinnati Detroit Milwaukee New Haven New Orleans
Philadelphia Pittsburgh St. Louis St. Paul
SAN FRANCISCO—584 Mission St. LOS ANGELES—2260 East 15th St.

Represented in Canada by CANADIAN INDUSTRIES, Ltd.
Acids and General Chemicals Division, Montreal and Toronto



Write for Folder



MARCHING ON TO SALES!

START your products on the march toward bigger sales—and profits. • Make your PACKAGE sound a stirring note of *action*. Use good CANS to tell your unseen product's VALUE.

- Manufacturing good CANS — designing and decorating them — calls for expert knowledge and skill. You'll find both right here! • PLAIN CANS too? You bet!

METAL PACKAGE CORPORATION

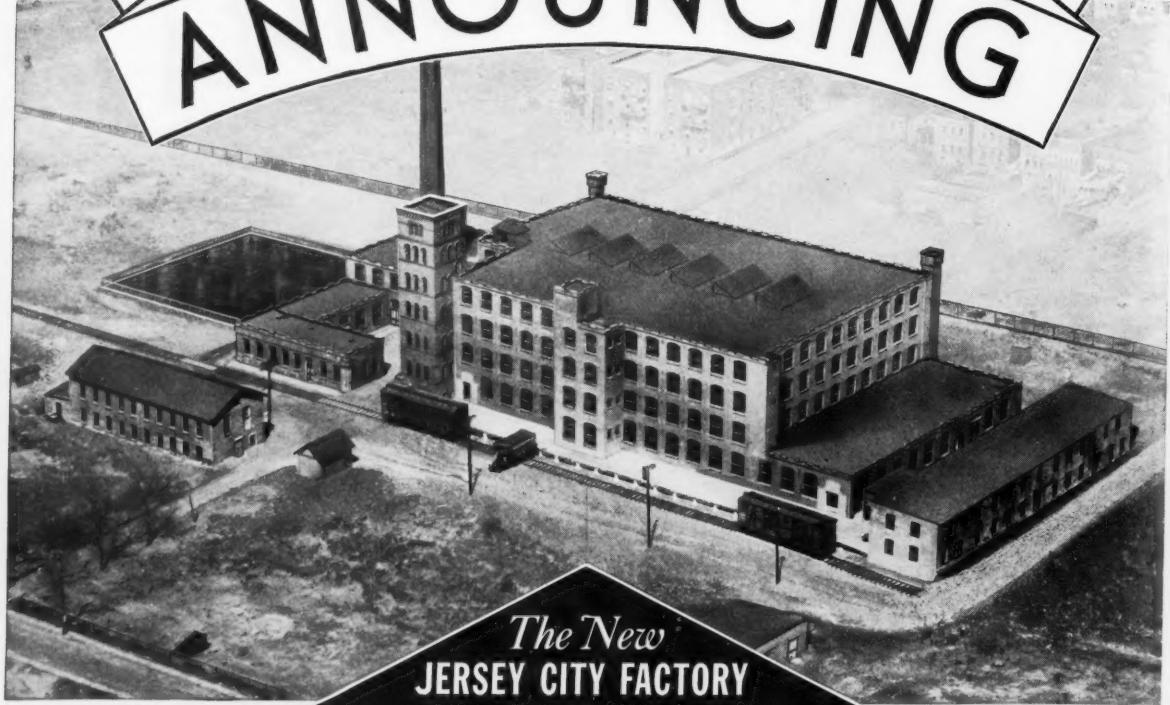
ESTABLISHED 1909

110 E. 42 ND ST., NEW YORK CITY

• One of America's Largest Canmakers •

SALES OFFICES AND PLANTS • NEW YORK CITY • BALTIMORE • BROOKLYN • CHICAGO • BOSTON • THE FISCHER CAN COMPANY DIVISION • HAMILTON • OHIO

ANNOUNCING



The New
JERSEY CITY FACTORY
 OF
WILSON & BENNETT MFG. CO.

*Steel Container
 Specialists*

NOW! This Modern, New Steel Container Factory is Ready to Serve You in the East With Fine Quality Steel Barrels, Drums, and Pails.

The opening of this new factory in the heart of the Great New York Industrial area, marks the completion of another forward step in the Benetco program of providing a dependable quality of Steel Shipping Container and the finest possible service to manufacturers.

We cordially invite you to visit this modern plant.

Write, wire, or 'phone (at our expense) for prices and full information on your steel container requirements — no obligation to you.



WILSON & BENNETT MFG. CO.

6528 So. Menard Ave., CHICAGO

Telephone: Republic 0200

EASTERN OFFICE AND FACTORY

353 Danforth Ave.
 Jersey City, N. J.

PHONES:
 DElaware 3-4700
 COrtlandt 7-0231

SOUTHERN OFFICE AND FACTORY

Cortez and Bienville Sts.
 New Orleans, La.

PHONE:
 Galvez 2171

STILL SPARKLING CLEAR AT 4° BELOW ZERO C!



TRY this test on the liquid soap you are now buying -- particularly the concentrated (40%) which you are using as a base to produce liquids of lower soap content.

"BUCKEYE" and "GEM" concentrate liquid soaps remain absolutely clear at temperatures below zero C., lending themselves perfectly for use at all temperatures as a base in producing liquids of lower soap content.

Just dilute them with distilled water --- no need whatever for any filtering.

Send for samples and prices. No obligation.

THE DAVIES-YOUNG SOAP CO.
Dayton, Ohio

"BUCKEYE" CONCENTRATE
and
"GEM" CONCENTRATE
Liquid Soaps

Copyright 1934
By The Davies-Young Soap Co.

November, 1934

Say you saw it in SOAP!

Niagara CAUSTIC POTASH

(SOLID, FLAKE OR LIQUID)

quality constant—as constant
as Niagara itself

Here at Niagara Falls, "constant" has a real significance. The hour-after-hour-after-hour flow of millions of gallons of water is a mighty reminder of Constancy . . . a constancy such as Niagara Alkali Company offers in the quality of its Caustic Potash.

Remember too—that Niagara Alkali Company was the first in America to produce Caustic Potash.

So whether you use Solid, Flake or Liquid, always specify "Niagara" . . . to assure yourself of pound-after-pound uniformity.



NIAGARA ALKALI COMPANY

9 EAST FORTY-FIRST STREET, NEW YORK, N. Y.

Associated with Electro Bleaching Gas Company, Pioneer Manufacturer of Liquid Chlorine



PERFUMES FOR SOAP

FELTON CHEMICAL CO., INC., bring to you an important message concerning the economical scenting of hand soaps and toilet soaps.

As the result of innumerable tests, in our laboratory soap equipment, we have been able to choose a large number of reasonably priced raw materials, all absolutely safe for incorporation in soap, which, when skillfully blended, permit us to offer a complete assortment of floral odors for soap, at a uniform price of one dollar a pound.

HAWTHORNE

HONEYSUCKLE

LILAC

LAVENDER

NARCISSUS

JASMIN

ORANGE BLOSSOM

PINE NEEDLES

ROSE

SWEET PEA

and many other flower notes.

PRICE—\$1.00 PER POUND

● Write for liberal working samples.

FELTON CHEMICAL COMPANY, INC.

603 JOHNSON AVENUE, BROOKLYN, N. Y.

AROMATIC CHEMICALS — NATURAL ISOLATES — PERFUME OILS — ARTIFICIAL FLOWER & FLAVOR OILS

Stocks carried in following cities:

Chicago, Ill.
1200 N. Ashland Ave.

New Orleans, La.
ROBERT E. FELTON
Balter Bldg.

St. Louis, Mo.
KIEFER SALES
& ADV. SERVICE
1014 Locust St.

A COMPLETE SERVICE
FOR THE WEST
FELTON CHEMICAL CO.
INC.
515 So. Fairfax Ave.
Los Angeles, Calif.



Our first customer draws a comparison —



The Cincinnati Soap Co.

Cincinnati, U.S.A.
Oct. 15, 1934.

Mr. R. A. Jones,
R. A. Jones & Company, Inc.,
Cincinnati, Ohio.

Dear Mr. Jones:-

The first two cartoners you ever made are operating in the same room with our new Constant Motion machine. The contrast is interesting. It is as great as that in the first automobiles and their latest models.

We think you will have to drive up to our plant at Dayton and see the old and new machines side by side to fully realize the progress you have made in the art of automatic packaging.

Very truly yours,

THE CINCINNATI SOAP COMPANY

G E Bailes
Purchasing Agent.

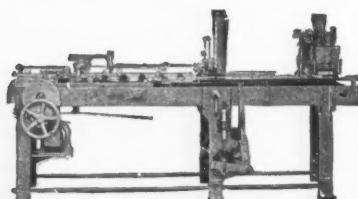


The CONSTANT MOTION CARTONER

of which the Cincinnati Soap Company kindly writes packages Verlon toilet soap and three other of their well known brands in different sizes of cartons. It can be changed in fifteen minutes from one size and brand to any other.

The packaging is equally good on all. With our patented chain method adjustability involves no sacrifice of quality.

The machine does the highest quality of packaging at the rate of 150 cakes per minute, without noise or vibration.



The Standardized Constant Motion Cartoner packages bottles, jars, tins, collapsible tubes and many other articles. It folds direction sheets and inserts them and corrugated liners with the loads.

**R. A. JONES AND COMPANY, INCORPORATED
P. O. BOX 485, CINCINNATI, OHIO**



SOAP

Volume Ten

Number Eleven

EDITORIAL

THE retail grocers and druggists have been having quite a little controversy over the matter of which NRA code applies in the sale of soap. Although the bulk of both toilet and laundry soaps are sold through the grocery stores, the druggists maintain that they cannot afford to sell at prices as low as those which the grocers charge. Therefore, they, the druggists, want the retail drug method of pricing to apply to all soap sales, holding that if the grocers sell lower, the grocers will get all the soap business and the druggists will get none.

Inasmuch as the scale of retail drug store prices for soaps is higher than the grocery scale, we should like to see the drug scale adopted. However, where is the logic of this when the grocers sell probably three times as much soap as the druggists? But if soap is removed from the jurisdiction of the retail drug code, according to a member of the National Retail Drug Code Authority, "it will become the worst football in the history of the trade." Why the future tense? We have never noted that soap was handled with any great delicacy by either drug or grocery trades.

In some quarters, the retail drug trade is being criticized for attempting to have placed under the jurisdiction of its code a group of products which are sold in much larger tonnage by another trade. The code controversy is held to be just another case where the druggists are trying to force business into their stores through legislation or regulation. Irrespective of this criticism or of the decision in the case, there is no doubt but that the sales records show soap products to be preponderantly grocery items. We do hope, however, that independent of this

controversy, some method can be found in the near future to raise the general level of soap prices as sold in the grocery trade.

ALKALI production of the United States will by the end of 1934 have been stepped up some 300,000 tons over the figures for 1933. In 1933, a rough estimate places the total production of alkalis of all kinds, that is caustic soda, soda ash, and modified sodas at 2,500,000 tons calculated back to 58 per cent soda ash. Under ordinary conditions, this is ample for the consuming needs of the country. That three new plants should be built has evinced some wonder from consumers, both large and small. The fact that all three plants are located in the far south, two in Louisiana and the other in Texas, has puzzled not a few. Does the alkali industry look for the next great wave of industrial development in the south and southwest, or are the new plant locations dictated by more economic transportation to markets now served by other plants?

That leading consumers were anticipating another alkali price war, was apparent several months ago. They have known for some time that accumulations of alkali at production centers have been larger than usual. They saw what happened to the price of caustic potash when an additional American producer was reported about to enter the field. They were told that the smaller producers of electrolytic caustic soda have been very anxious to cut down their stocks. But, with all this, formal notice has been served by the alkali industry that prices for 1934 will remain unchanged. The significance of the early issuance of schedules for 1934 seems to be

quite apparent. The alkali producers are evidently determined that there shall be no repetition of the debacle of 1931 when competitive animosities just about wrecked the industry for that year. Production at new plants will likely be offset by curtailment of output in other plants if necessary. Excess "outside" production will probably be absorbed or a market found for it. Among producers, there may develop some minor causes of friction in 1935, but there is no likelihood that it will break out into open price warfare. Every effort will be made to keep the market stable, which in the last analysis, is probably to the ultimate benefit of the rank and file of consumers.

— • —

THE Federal Emergency Relief Administration plans to open five soap plants in various parts of Kentucky, according to a report from Louisville. The soap is to be produced from donated "scraps of meat, fat, tallow and other materials" from local merchants. The soap will be distributed to the needy by the FERA of that district. About 150 men are expected to be employed in the five factories.

This is the substance of the report as it comes to us. The details of the idea give us a mild case of chills and fever. For five soap plants, 150 employers—30 men to a plant. Thirty men with soap equipment can make a pretty big pile of soap. But the raw material is to be meat and fat scraps gathered locally. And the soap is to be—heaven knows what, but we also have a fair idea.

Before this thing goes any further, why does not some representative or group of representatives of the soap industry enlighten somebody in Washington about such asinine waste of public money? Of course, we know that waste of public money is the order of the day, but nevertheless, this venture is so completely berserk that somebody should do something to protect the Kentucky FERA from itself. Somebody ought to tell them that the manufacture of soap is the wrong line of endeavor to give a high degree or even a fair degree of employment per unit of production. The labor factor in soap production is probably lower than in a hundred other types of employment. And they are going to open soap plants to give employment. We wonder where this orgy of dizzy spending will break out next.

IN LAST month's issue, we expressed mild astonishment at the basis on which the recent strike at the Hammond plant of Lever Brothers Company was reported settled, and we were very much surprised when we were informed by a representative of that company that our comments were based on misinformation.

We are now informed that the men went back to work on exactly the same basis on which they went out, and conditions at the plant, which were extremely good before the strike, were exactly the same when the men returned. The representative stated that there was absolutely no arbitration of wages and no change in working conditions, and for this reason it was pointed out the settlement of the strike at Hammond will not become the precedent for calling strikes in other soap plants.

As for recognition of the union, it was also pointed out that there had been recognition of the right of collective bargaining by employes of the soap industry when the NRA code was adopted a year ago. This was in no way changed by the strike, and naturally continues to remain as it was before. The net profit or loss was the cessation of operations for several weeks and the loss of wages for the same period by the employes.

With this information in hand, our comments on preparation for possible strikes of the future lose most of their force. Apparently our guess of two months ago that the professional labor organizers "picked the wrong people to fool with" just about represented the facts in the case.

NEW members of Congress were chosen from all parts of the country in the recent election. Many of these newly elected representatives will go to Washington in January knowing little about the details of legislation passed by the last Congress, and particularly the background of such legislation. The facts of the coconut oil excise tax, and why it is discriminatory and unfair, should be placed before these new members between now and the first of the year by soap makers in districts where they have been chosen. It is altogether probable that the Administration will also take the matter up with newly elected Democrats if and when the subject arises in the next Congress.



The plant of B. T. Babbitt on West, Washington, and Greenwich Streets in lower New York, fifty years ago, almost in the shadow of Wall Street. This picture was originally published about 1880. The caption termed the plant a "soap and saleratus manufactory—B. T. Babbitt, proprietor."

SOAP MANUFACTURE

What Progress Since 1870?

DESCRIPTION of "modern" soap manufacture fifty or sixty years ago, reveals how few changes have taken place in the basic processes of the industry over the past half-century. With all the tremendous strides which have been made in the fields of transportation, chemistry, electricity, and industry generally, soap is still manufactured pretty much in the same manner as it was in Civil War days. Of course, innumerable refinements in manufacture have come to the industry, but with few exceptions, these refinements have been of a mechanical nature,—equipment for more efficient handling of materials, power slabbing and cutting, automatic soap presses, conveying and wrapping equipment, and numerous others. The basic process of saponifying a fat with an alkali is still carried out just about in the same manner as it was fifty and even a hundred years ago.

Along about 1870, an article was published describing in quite some detail the manufacture of soap at the plant of Enoch Morgan's Sons in New York. From the pages of the original article, it is not clear whether it was part of a magazine or a book. The title is "Soap—Its History and Manufacture," and it presents an extremely interesting picture of the early history of soap,

the processes at the Morgan plant, puts forward a theory of detergency, and heralds the opening of the scientific era in the manufacture of soap and candles. A cross-section drawing of the Morgan plant was included with the description. Other views of soap plants shown were published in current magazines at about the same time, the Taylor advertisement in 1860, the Babbitt and Higgins drawings around 1880.

In telling about the Morgan plant among other things, the original article said:

"The word 'soap' is found in two places in our 'authorized version' of the Bible; namely, Jeremiah ii. 22, and Malachi iii. 2. The exact meaning of the Hebrew word, however, is not known, and the best authorities suppose that what is meant by it was, probably, the ashes of the glass-wort, a plant common in the dry parts of the East, and which may be used as a substitute for soap. Soap itself the Jews at that time had not. There is no reason, Sir J. G. Wilkinson says, for believing that the ancient Egyptians, from whom the Jews derived so much of their civilization, knew or used it. Nitre, or a lye from the ashes of glass-wort and similar plants, or the juice of saponaceous plants, was used instead. So was fuller's earth, and so was

mere washing in water, accompanied by rubbing or stamping."

Soap, as we now know it, appears to have been a barbarous rather than a civilized invention, and to have been discovered by the Gauls or Germans, or both, before the Christian Era. Soft soap was apparently made before hard soap, as a potash lye from the ashes of trees was at first used, and not soda. From these barbarians the Romans learned to make it, and from the Romans, the Greeks,—an order of introduction the reverse of that which commonly prevails. Some kind of soap—probably a pretty caustic kind of soft soap—was used by the Roman ladies to dye their hair red or yellow. Soap was found in one of the houses of Pompeii (destroyed A. D. 79); so that it was pretty quickly and generally adopted by the most civilized people of ancient times after they became acquainted with it.

No records appear to be known of the continuance of the manufacture of soap during the first seven centuries of the Christian Era, though it is extremely probable that it was constantly made. There is, however, good authority to prove the existence of soap manufactories in Italy and Spain in the eighth century. About the twelfth the business was established at Marseilles, that part of France affording olive oil and soda, two excellent materials, and soap has been made there ever since. Within two centuries afterwards the business was begun in England, and Bristol furnished most of that country with it for a long time, at a cost of one penny a pound. In 1524 the first was made in London.

It is a curious fact, that although we know very well what soap is used for, and what it does, we do not know how it does it.

The usual statement made on the subject is this: Soap, consisting of fat and alkali, removes grease or other dirt by surrendering, when dissolved in water, part of its alkali, which thereupon proceeds to combine with the grease or dirt, forming a new material, or addi-

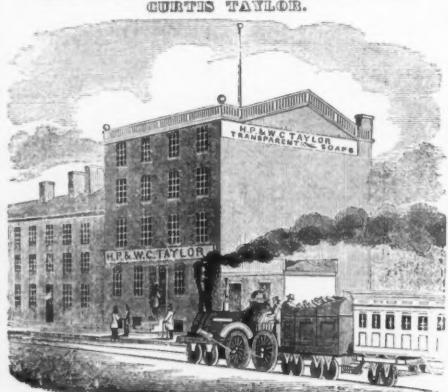
tional portion of soapy matter, which water will remove. But if this were the case, the "part of the alkali" all alone would do the business. We do not send a hundred men to bring a parcel, of whom one brings it, after all.

Soap is a chemical compound, and is, chemically speaking, a "salt," resulting from the combination of an acid with an alkali. The acid is a "fatty acid," namely, stearic, margaric, oleic, etc.; the alkali is almost universally either soda, which makes hard soap, or potash, which makes soft soap. And soap-making is simply conducting this combination of the acid and alkali.

A few figures will show how important the soap business is. At Marseilles alone not less than one hundred and thirty-five millions of pounds of soap are made each year. In 1860 more than six million three hundred thousand dollars were invested in soap and candle factories in the United States, turning out about eighteen and a half millions of dollars' worth annually of the manufactured articles, without including in this total value a very great quantity of home-made soft soap. In 1852 there were made in only eighty towns of Great Britain (not including Ireland) more than one hundred and five millions of pounds of soap.

UNTIL the present century, soap had always been made, to use a common expression, by "rule of thumb"; that is, according to the practice which had grown up in one or another locality. The first important scientific epoch in the history of the business was the introduction of a mode of making artificial soda in the beginning of this century by Leblanc, who thus supplied to Marseilles the want caused by the war with Spain, which cut off the usual importations of barilla. Not long afterwards the celebrated French chemist Chevreul made a series of investigations into oils and fats, being the second important scientific epoch in the history of soap, and which resulted in placing the busi-

30 H. P. & W. C. TAYLOR,
Manufacturers of the original and only
SUPERIOR TRANSPARENT SOAP
Made in the United States. Business established in 1819 by their father,
CURTIS TAYLOR.



The largest Toilet Soap Establishment in the United States.

The following articles are confidently recommended by the Manufacturers as made of

THE PUREST MATERIALS.

and in every way entitled to the great celebrity they have acquired.

<i>Transparent Soaps</i>	<i>Toilet Soaps</i>
Large Wash Balls,	Palmyra Floating Soap.
Small "	Lily "
Large Cake,	Philadelphia Soap.
Small "	Large " "
<i>Saponaceous Shaving</i>	<i>Soaps</i>
Comp.	Bouquet "
Old Size, 4 oz.	Small do. "
New " 3 "	Verbena "
" 2 "	Honey "
Barbers Soap,	Brown Windsor Soap
Military "	

Eight Highest Premiums awarded, including a PRIZE MEDAL in London, 1851

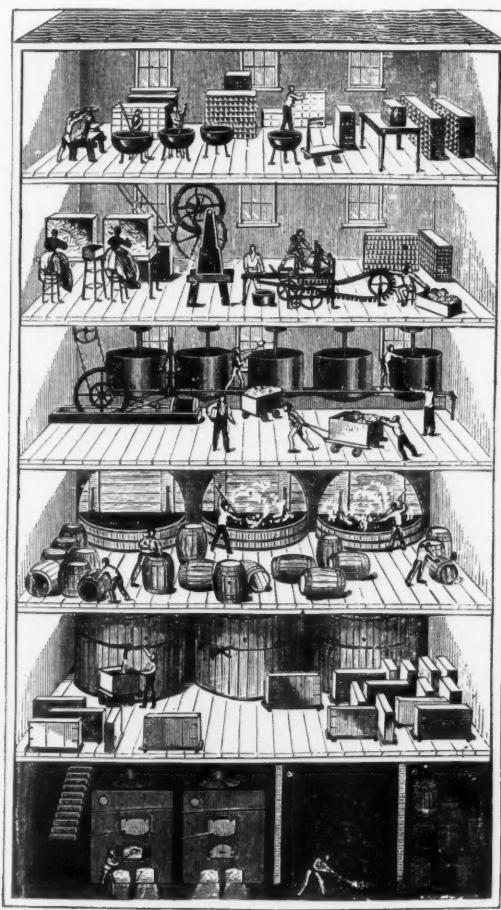
H. P. & W. C. TAYLOR,
379 North 9th Street,
Below Coates, PHILADELPHIA.

An advertisement printed in a Philadelphia magazine in about 1860. Note that two brands of floating toilet soap are offered and that the factory is stated to be "the largest toilet soap establishment in the United States."

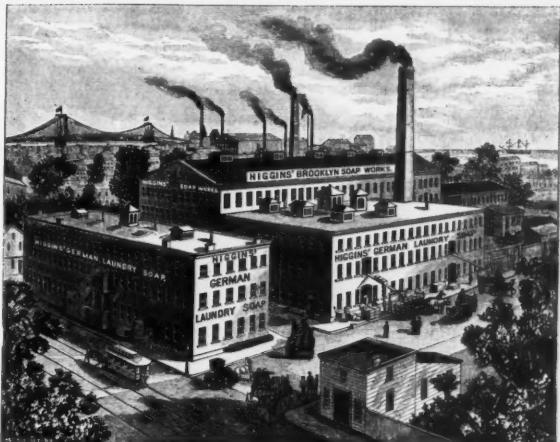
ness of making both soap and candles on a really scientific basis.

The best and clearest account of the process of soap-making will be given by following it through the works of a large and scientifically, as well as successfully, conducted factory. For the purpose of accomplishing this object, the old established firm of Enoch Morgan's Sons, of New York City, was visited, and the materials followed from the pan to the package, with constant explanations from one of the members of the firm, himself a practical chemist and a practical manufacturer. For the present purpose, it may be supposed that the article to be made is the common yellow or bar soap; and what is sought is neither a strictly scientific statement, nor a fulness of information that would enable the reader to build and run a soap factory for himself, but a plain and readable account of the operations.

Filling the central part of the first floor of the factory of Enoch Morgan's Sons, near the foot of Bank Street, in New York, is a range of four or five immense iron structures called pans. These extend from the floor through the ceiling, and breast high into the room



A descriptive drawing of the Enoch Morgan plant as it appeared during Civil War days. From an article published in about 1870.



A view of the Higgins soap factory in Brooklyn, the home of the then famous Higgins' German Laundry Soap, which was published in about 1880.

above. They are twelve or fifteen feet wide and of about the same depth, and will hold, if filled to the brim, about one hundred thousand pounds each, or, some eleven or twelve thousand gallons.

The first thing to do is to prepare some lye; that is, a solution of caustic soda in water. This is done by the action of fresh-slacked lime, which, on being mixed with carbonate of soda in water, seizes the carbonic acid, becomes a carbonate of lime, and leaves the soda in its caustic state dissolved in the water. Several different portions of this lye are prepared, varying in strength.

Next comes "pasting," which is the first union of the materials into a soap-like form. It is accomplished by repeatedly and slowly boiling refined white tallow, first with the weakest and then with stronger and stronger lyes. At each boiling, a successive portion of the tallow divides into its constituents of oleic and stearic acids and glycerine. The former, which are "fatty acids," combine with the soda from the lye, and the glycerine drains out and mixes into the water of the lye. After each boiling the pan is allowed to settle; the light soap material rises to the top, and the heavy "spent lye" and glycerine sink to the bottom, and are drawn off, when more lye is added and the process repeated.

"Pasting" is complete when the grease is thoroughly "killed"; that is, when soda enough has united with the stearine to separate all the glycerine; which of course makes an end of the grease, and puts soap in its place. The new material consists of little yellowish grains (the soap) floating on the liquid of the "spent lye."

After pasting is complete, a third or fourth as much resin as there was tallow is added in coarse powder, and stirred in. The effect of the resin is to improve the yellow color of the soap, to make it more uniform in texture, and softer and easier of solution in water.

The next process is to add an excess of solution of caustic soda over what is necessary to thoroughly
(Turn to Page 53)



SODA ASH

CAUSTIC SODA

MODIFIED SODAS

CALCIUM CHLORIDE

Branch Sales Offices

BARBERTON, OHIO

431 - 451 ST. CLAIR ST.
CHICAGO

CAREW TOWER
CINCINNATI

SANTA FE TERMINAL BLDG.
DALLAS

Plant at BARBERTON, OHIO



THE COLUMBIA ALKALI CORPORATION

Executive Sales Offices

EMPIRE STATE BUILDING, NEW YORK

Naphthenic Acids Soaps

Possibilities of Their Uses in Specialty Soaps and Disinfectants

By DUDLEY J. BACHRACH

Chief Chemist, Clifton Chemical Co.

WHAT with the plowing under the crops and the high tariffs and processing taxes on many oils, the time may not be far distant when the soap kettle will feel a distinct shortage of fats. At present the soap makers utilize oils and fats which are left over from the needs of the food industry. The value of cottonseed, coconut and corn oils is largely dependent on the requirements for their use as food. What is left over the soap maker bids for. If the production or import of vegetable and animal fats and oils should be so reduced as barely to cover the needs for human consumption, we shall see soap making raw materials go sky high and even become unobtainable. This possibility may or may not be a problem of the near future,—but the prospect offers some incentive for research on non-fatty products which will saponify and yet not be fit for human consumption.

The chemical curiosity of today often becomes the commonplace of industry tomorrow. Only a few years ago Prof. Bergius made his first experiments on the hydrogenation of coal, lignite, pitch and coal tar residues,—and, synthetic gasoline is now at hand. The technology is known and if gasoline should increase too much in price or should the oil wells cease to flow, we can always be comforted in the feeling that we shall not have to scrap all gas engine vehicles and equipment, but will still have a supply of gasoline due to chemical technology. So, likewise, it behoves the soap maker to seek an "ace in the hole", pending the day when vegetable and animal glycerides are not readily and cheaply available.

As I do not feel competent to pass on the problems of the hard soap industry, I will, therefore, touch on naphthenic acid soaps as they may be of value to the potash and liquid soap field and to the disinfectant industry.

Naphthenic acid is made at present in moderate quantities in the United States. It has been found here so far in quantities only in some California crude oils. It is a by-product from the refining of such California petroleum crudes, and although not available at present in quantities of more than a few million pounds, its production could, no doubt, be stepped up somewhat and ultimately it might be made synthetically.

The writer used a purified naphthenic acid containing 95% or more of naphthenic acid for his experiments. It is a fairly constant mixture of $C_6H_{11}COOH$, and its

homologues of higher molecular weight. The chemical and physical constants are as follows, as given by the manufacturer:

PHYSICAL TESTS

Acid No., Mg. KOH per gram	245
Combining weight	230
Purity, % naphthenic acid	95 plus
Sulfur, %	0.044
Flash, °F	200
Saybolt Viscosity @ 130°F., sec.....	133
Color	3 N. P. A.

Naphthenic acid costs about 13c. per lb. today. As it requires about 25% more alkali to saponify than the glycerides, the cost of the soap is reduced somewhat, because alkali is cheaper than oil. Pure 100% anhydrous commercial potash naphthenate costs about 12½c. per pound for raw materials. A few costs of 100% basis potash soaps made with vegetable oils are as follows:

Potash castor oil	10.75c
Potash corn oil	9.2c
Potash Soya bean oil	8.1c

The cost of naphthenates is somewhat higher than vegetable oils but this condition may not always be so.

THE first thing done with the naphthenic acid was to make a soft potash soap. I stirred into the liquid acid a measured quantity of commercial liquid caustic potash, without admixture of extra water. Combination was exothermic and rapid. The resulting soap was an unctuous golden-brown transparent substance, exceedingly soft. The total anhydrous matter was 80%. I washed my hands with it and found that it gave a profuse foamy lather, something like the lather of a coconut oil soap.

I then dissolved some in water so as to make a 20% anhydrous soap. The naphthenic acid soap dissolved readily in warm water and gave me a clear liquid soap which was cleansing and foamy. There was one very substantial objection. After washing the hands and drying, I found a disagreeable odor which persisted for a long time. However by the addition of oil lavender, this evil odor is cut down and doubtless other perfume materials can be added with still better results. The smell is, I understand, some thio compounds present in small percentage and may ultimately be eliminated from the naphthenic acid itself.

In the discussion that follows the term, "naphthenic acid soap", refers to the soap made with liquid potash

and commercial naphthenic acid answering the specifications heretofore given, testing about 80% anhydrous matter. All the results obtained can be calculated back either to a basis of 100% anhydrous or less than 80%, as may suit the purpose.

After looking at my potash naphthenate, I was struck by its unguency and softness. I thought it would be a good idea to try this soap out in substances of interest to the soft soap and disinfectant industry. I took steam distilled pine oil and stirred in 20% of my soap. It dissolved readily and easily at room temperature. The result was a light amber colored soluble pine oil, containing 80% of oil. On pouring this into cold water, a completely soluble emulsion was formed. As I have obtained F.D.A. coefficients of 5 already, using 65% of certain steam distilled pine oils, it is reasonable to suppose that if the proper pine oil is used, that coefficient 6 pine disinfectants can be produced readily. I have not checked up this result as yet with an outside laboratory. Besides, it is far easier to make a pine disinfectant by stirring in potash naphthenate than by the usual process of heating pine oil with rosin and caustic soda. Darkening is inevitable with this method, whereas the natural light amber color of pine oil can be retained by the cold process.

Where freight rates are high or in the South, where pine oil is produced, pine disinfectants can be made on the ground by this new simple method. All that is necessary is to buy the pine oil and the naphthenic acid soap and then mix them at room temperature.

Potash naphthenate made a satisfactory emulsion with Scotch high boiling cresylic acids. Potash naphthenate also emulsified coal tar creosote oil, but here the higher cost of this soap over rosin soap would preclude its use even though a smaller quantity does the work.

NOW I come to the most interesting part of the tests—namely, potassium naphthenate as a germicide. Soaps have been used for centuries as cleansers. People rubbed and scrubbed and scrubbed and rubbed. Germs rolled off and were washed off, but rarely killed, to wit; Reithoffer, Arch. Hygiene (27) H4 according to Rideal states that *Bacillus C. Aureus* will remain unchanged for an hour in 18 to 20% soap solutions, and Rideal in his book on "Disinfection" says, "Ordinarily, when disinfecting agents are added to soaps, the effect is worse than if the disinfectant is applied without the soap." He also says in connection with washing, "From these observations it may be concluded that the use of a disinfectant soap is inefficient, the better plan being to wash first with the soap, and afterwards to apply an antiseptic lotion."

From the foregoing, it would appear that ordinary soap may be a good cleanser but has little value as a disinfectant. There is, therefore, a field for a soap which will actually kill germs. Potash naphthenate seems to be the answer. In finding this result, I first thought that potash naphthenate could be used as a

"booster" in making disinfectants; i.e. to increase the coefficient. In order to ascertain whether this was so, it was necessary to test against *E. typhi* germs.

I made up my usual 80% anhydrous product, taking especial care that the product contained no free alkali, because I did not want to vitiate the results. Caustic alkali has disinfecting value and its presence would distort any information about the germ killing power of the soap.

I then gave this soap to a well-known commercial bacteriological laboratory that specializes in determining phenol coefficients. They made stock solutions of the soap,—and note that the dilutions reported are those of the 80% soap, not the anhydrous. The anhydrous results would therefore be somewhat greater. The results are given below.

GERMICIDAL TEST

Food and Drug Administration Method
as published in

U. S. Dept. of Agriculture Circular 198, December, 1931
Organism—*E. typhi*

Age of Culture—24 Hours at 37° C.

Medium—F.D.A. Beef Extract Broth

Prepared with Armour's Special Peptone

Organic Matter—None

Temperature of Medication—20° C.

Dose—0.5 cc. of Unfiltered Culture to 5 cc. of
Diluted Germicide

Subcultures—One 4mm. Loopful to 10 cc. of Broth

The subcultures were incubated 48 hours at 37° C.
with the following results:

Sample	Dilution	Minutes of Exp. to Disinfectant		
		5	10	15
Potash	1:4	—	—	—
Naphthenic	1:5	—	—	—
Soap	1:6	—	—	—
	1:7	—	—	—
	1:8	+	—	—
	1:9	+	—	—
	1:10	+	+	+
Phenol	1:80	+	—	—
	1:90	+	—	—
	1:100	+	+	+

The result shows that a dilution of one to seven kills the germs in five minutes compared to 1 to 80 phenol—a coefficient on the anhydrous basis of about 0.1. As a booster of phenol coefficients in disinfectants, naphthenic apparently has some effect but not very much.

My next test was against *Staphylococcus aureus*, the common pus germ. Would this soap kill aureus in five minutes at 20° C. at any practical dilution? If so the results would be valuable. The hands or parts of the body could then be immersed in and washed with this dilution of liquor soap without further admixture of water, left on for at least five minutes, and then kill pus germs,—something that all ordinary soaps will not do. I had the second test made by the same laboratory and the results are submitted below.

GERMICIDAL TEST

Food and Drug Administration Method (Special)
as published in

U. S. Dept. of Agriculture Circular 198, December, 1931
Organism—*Staphylococcus aureus* (D.C.)
Age of Culture—24 Hours at 37° C.
Medium—F.D.A. Beef Extract Broth
Prepared with Armour's Special Peptone
Organic Matter—None
Temperature of Medication—20° C.
Dose—0.5 cc. of Unfiltered Culture to 5 cc. of
Diluted Germicide
Subcultures—One 4mm. Loopful to 10 cc. of Broth
The subcultures were incubated 48 hours at 37° C.
with the following results:

Sample	Dilution	Minutes of Exp. to Disinfectant		
		5	10	15
Potash	1:4	—	—	—
Naphthenic	1:5	—	—	—
Soap	1:6	—	—	—
	1:7	—	—	—
	1:8	—	—	—
	1:9	—	—	+
Phenol	1:60	—	—	—
	1:70	—	—	—
	1:80	—	—	—

A 1:5 solution of the naphthenic soap or about 1:6 on the anhydrous basis killed *Staphylococcus aureus* in five minutes at 20° C. This meets the definition of the Food and Drug Administration for an antiseptic. Another test was made in addition to making the usual transfers from the seeding tube to the tubes of sterile broth after the 5, 10 and 15 minute intervals.

A loopful of the mixture was transferred from the seeding tube to tubes of melted agar at a temperature of about 42° C. These tubes of agar were then poured into dishes and when solidified were incubated for 48 hours at 37° C.

The reader will note in the figures listed below that results are given for 5, 10 and 15 minute treatments and the test was run at 20° C. not 37° C. The control listed at the bottom of the report shows 900,000 bacteria per loopful in a control seeding tube in which water and culture were mixed in the same proportions as the diluted soap and culture in the test.

The information in the agar count tests was kindly furnished by the bacteriological laboratory making the test. The results of the tests in which the counts were shown agree quite closely with the results of the usual F.D.A. germicidal test.

Agar Counts to Show Number of Organisms Transferred in

GERMICIDAL TEST

Food and Drug Administration Method (Special)
as published in

U. S. Dept. of Agriculture Circular 198, December, 1931
Organism—*Staphylococcus aureus* (D.C.)
Age of Culture—24 Hours at 37° C.
Medium—F.D.A. Beef Extract Broth
Prepared with Armour's Special Peptone
Organic Matter—None
Temperature of Medication—20° C.
Dose—0.5 cc. of Unfiltered Culture to 5 cc. of
Diluted Germicide

Subcultures—One 4mm. Loopful to 10 cc. of Broth
The subcultures were incubated 48 hours at 37° C.
with the following results:

Sample	Dilution	Minutes of Exp. to Disinfectant	5	10	15
Potash	1:4		0	0	0
Naphthenate	1:5		0	0	0
Soap	1:6		0	0	0
	1:7		5	0	0
	1:8		8	2	0
	1:9		24	2	8
	1:10		85	22	17
	1:12		140	50	350
	1:15		600	550	350

Remarks:—In the previous test on *Staphylococcus aureus* duplicate transfers were made to broth tubes and tubes of melted agar (42° C.). The agar tubes were poured immediately and incubated at 37° C. for two days after which they were examined and colonies were counted with results as shown in the accompanying table.

Control: 5 cc. water + 0.5 cc. culture 900,000

No attempt has been made to patent any of the processes or uses mentioned. It is sincerely hoped that further uses for these interesting soaps may be developed and that others may carry on research work along the lines already indicated and help to strengthen the position of potash soap and disinfectant industries.

A mixture of an animal fat such as lard with a vegetable oil such as cocoanut oil is heated with an excess of aqueous caustic potash. Excess alkali is neutralized with acetic acid. The product is cooled and the aqueous layer removed. The former is mixed with a hot kerosene extract of pyrethrum powder, then allowed to cool. Alcohol is added. The jelly formed is dissolved in water for use as a spray. J. R. Cattanach. British Patent No. 401,519.

Soy oil, which is not the same as soy bean oil but is a by-product in soy brewing, is used in the East in the production of low grade soaps. It consists mostly of the ethyl esters of mixed fatty acids. The oil has a specific gravity of 0.893 at 15° C., and contains about 16 per cent of free fatty acids as oleic acid. It is very dark in color and is resistant to the action of ordinary bleaching agents. Refining is accomplished by distillation. *Perfumery and Essential Oil Record*. 25, 295 (1934).

Sodium pyrosilicate hydrate is prepared from a hot concentrated aqueous solution of sodium pyrosilicate containing an excess of at least 23 grams of caustic soda per 100 cc. The solution is cooled to precipitate a pyrosilicate hydrate. The Canadian Industries, Ltd. Canadian Patent No. 345,348.

Oils, fats, waxes and fatty acids are bleached by treating in turn with a "per" compound and an adsorbent. The "per" compound may be hydrogen peroxide, a "per" salt, or an inorganic or organic peroxide. Any of the usual adsorbents may be used. Oesterreich-ische chem. Werke G.m.b.H. Austrian Patent No. 137,324.

Alkalies..

QUICKLY AVAILABLE

Because our plants and warehouses are well stocked . . . and located at convenient shipping points, we can insure prompt shipment of all orders for these ALKALIS. You will find our service fast, complete and economical. For further information and for up-to-the-minute quotations on these and other chemicals, you will find our district office helpful and ready to cooperate.

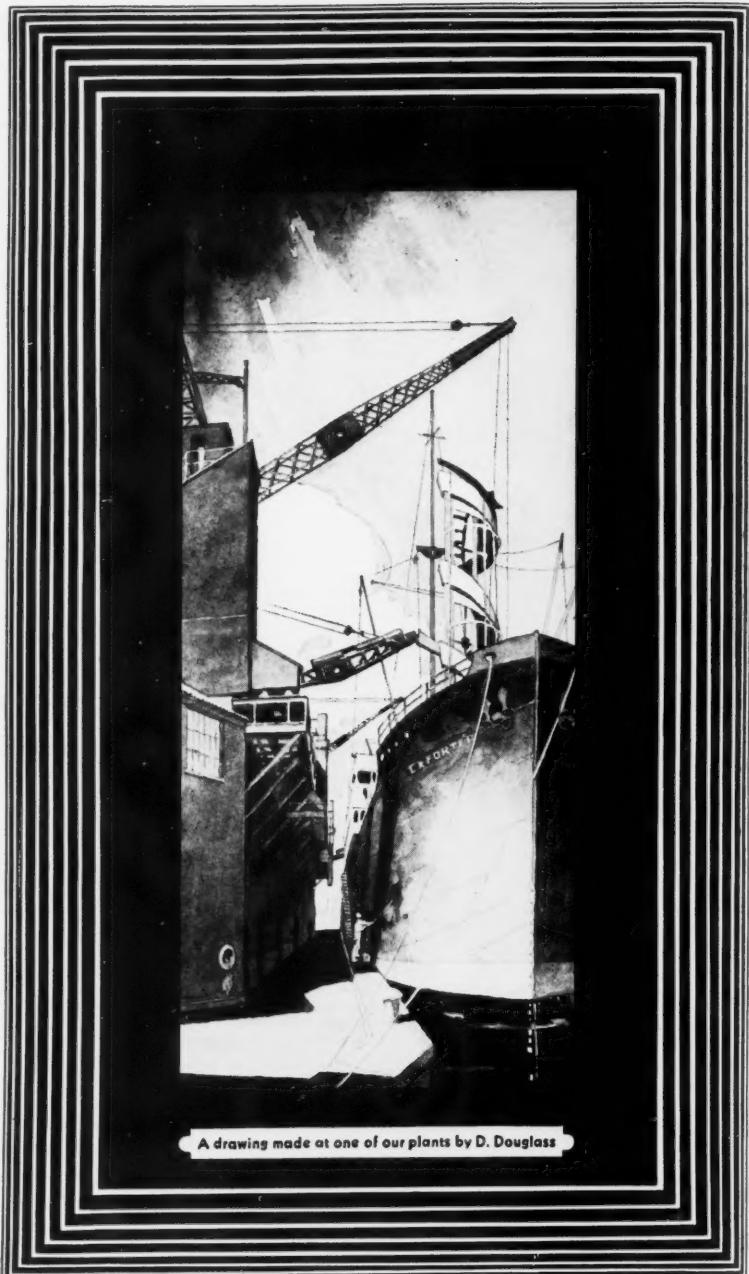
SAL SODA

SODA ASH

CAUSTIC SODA

CAUSTIC POTASH

CARBONATE OF POTASH



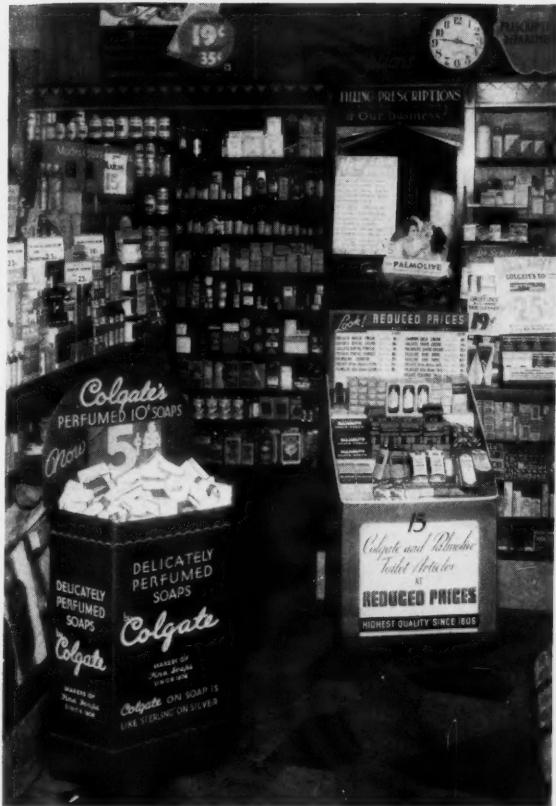
A drawing made at one of our plants by D. Douglass

**AMERICAN
CYANAMID & CHEMICAL
CORPORATION**



30 ROCKEFELLER PLAZA • NEW YORK, N. Y.

Say you saw it in SOAP!



Two types of display stands used with unusual success in the retail drug stores by Colgate-Palmolive-Peet — one for toilet articles and the other for toilet soaps sold exclusively through the drug trade.

What Retail Price?

The Method of Colgate-Palmolive-Peet for Eliminating Retail Price "Fiction" in Drug Store Sales

THE successful attempt to stabilize retail prices and put an end to price "fiction" which "has long been confusing to consumers, costly to retailers, and a curse which manufacturers have put upon themselves," is described in some detail by W. R. Veale, manager of the toilet articles department of the Colgate-Palmolive-Peet Co., in a recent issue of *Printers' Ink*. By retail price "fiction," Mr. Veale means the kind of pricing on package or in advertising which states fifty cents when everybody knows that the article is customarily sold for 39 cents. The method of retail price stabilization, as outlined by Mr. Veale, has been applied only to products sold exclusively through drug stores, that is toilet articles, shaving cream, tooth paste, and certain toilet soaps. Laundry soap products sold through the grocery trade and toilet soaps sold through both grocery and drug trades are not included in the price stabilization plan for obvious reasons.

In describing the C-P-P drug store price policy, Mr. Veale stated in part: "We have simply brought retail prices down to bed-rock, going about this so thoroughly

that the price-cutter's alibi is removed by the consumer's demonstrated willingness to take the goods at the new standard price levels.

"In brief, we have done this by putting the advertised prices down to the actual, going, retail market prices, and in a number of instances to new low prices. We have thus relieved the retailer of the necessity of cutting prices to move the goods, for we ourselves have brought these prices down to or below what might be called the 'traditional' retail levels for various items. In addition, we have backed up the retailer with a decisive weight of consumer advertising, both in publications and on the air, which features the new retail prices, as well as with effective merchandising displays also featuring honest-to-goodness prices right through to the consumer.

"Most important, we have assured the retailer of an adequate profit at the going retail price level by lowering our list prices to permit him to make 33-1/3 per cent gross profit. To help stabilize those profits, we have suggested 'minimum' prices which are not more than 10 per cent off the regular prices. In order that every

retailer may stand on an equal footing with all others, we sell direct to all who have an adequate credit rating, and at one price to all, large or small. Moreover, we pay the Federal Excise Tax on all products, and we pay the freight as well on all direct shipments, whether the order is for a minimum shipment or a carload.

"The most satisfying thing from the retailer's viewpoint is the fact that former so-called 'loss leaders' have become, in fact, profit leaders. For our 'fair play policy'—as it is called in promotion to dealers—looks as much to *profit* stabilization as to price stabilization.

"As we see it, the only difference between price stabilization and profit stabilization is that under a *profit* stabilization plan the manufacturer makes it possible for the retailer to sell the manufacturer's merchandise at a price stabilized high enough above the retailer's cost to yield a legitimate profit to the retailer, whereas price stabilization alone may be profitable to the manufacturer, and may or *may not* be profitable to the retailer.

"Much has been said and printed about price stabilization; practically nothing about profit stabilization. But what good does it do a retailer to have price stabilization *without profit*?

"On this point, it has always seemed to me that in any proper manufacturer-dealer relationship, the manufacturer should regard his responsibility toward the dealer who sells his goods in some such light as he regards his responsibilities toward those who are more directly in his service—that is, his employes. No employe may be expected to give his best without a fair wage; neither may any dealer be expected to operate as a live outlet for the products of any manufacturer who denies him a fair profit.

"THAT MAY be interesting to recapitulate the steps in our 'Profit Stabilization' plan, particularly as to the merchandising and advertising angles which brought results that effectively 'sold' the retailers as to the benefits they might reap now and over a period of years.

"*1. Reducing regular advertised prices on all principal products.* We put the emphasis first upon our dental cream, with the new reduced prices of the two sizes featured in every magazine advertisement and in our radio 'House Party' program. A frontal attack was made upon sales resistance, particularly to win new users, by means of a 'double your money back' guarantee. This was played up in newspaper advertising which reached an additional 14,000,000 families throughout the United States, along with monthly advertisements in leading women's publications. Reduced prices on shaving cream, shampoo, etc., were announced in advertising at the same time.

"This was followed, beginning August 11, with full-page, four-color advertisements on our Cashmere Bouquet toilet soap, featuring the reduced retail price, in four national magazines.

"*2. Reducing list prices.* On all items list prices were

made so as to show the retailer who buys direct 33-1/3 per cent gross profit at the newly reduced prices.

"*3. Suggesting minimum prices not more than 10 per cent off regular prices.* To help stabilize prices, our suggested minimum price for a 20-cent item is 18 cents; for 25-cent items, 23 cents; for 35-cent items, 33 cents; for 50-cent items, 47 cents, etc. Since we have brought regular prices down to a lower level, we believe that a 10 per cent leeway is entirely sufficient. In fact, thousands of druggists have proved, in the last six months, that they can get a satisfactory volume of business on our products at what are now the everyday prices. They have found it unnecessary to sell at the suggested minimum prices.

"*4. Having only one price to everybody.* No favoritism is shown to any purchaser, large or small, under our one-price policy, and in no way does any druggist who buys direct have any advantage over another. We pay, not only the Federal Excise tax, but also the freight on direct shipments.

"*5. Getting retailers to feature products at regular prices.* We help retailers to stabilize profits by constantly endeavoring to get them to put the emphasis on regular rather than minimum prices. Sales helps of various sorts are given free with various sized orders.

"One of the most popular sales helps is the new 'mass merchandise' window display which reproduces life-size and in full color, \$205 worth (at list prices) of Colgate-Palmolive products, eighteen in all, and all plainly marked with price tags. With adequate inside store displays, this merchandiser has produced sales results already mentioned.

"We also supply a new open floor display which occupies only 3 1/2 square feet of floor space, and by actual test moves more merchandise per square foot than any display of its kind ever used. It is specially designed for inside tie-up with our mass merchandise window display. A back card lists all the items on display and their prices, and this list is repeated on the sides of the display.

"To help the druggist to use his counter space to best advantage, we also furnish feature-sale price card index and individual price cards for all our items. Soap tables and counter display baskets have helped bring the soap business back to thousands of drug stores.

"Last, but not least effective, handbills featuring 'toilet goods economy sale' are supplied free, ready for imprinting of the druggist's name.

"But there is another party at interest, whom I should not fail to mention—the consumer. What does the consumer think of the price muddle which has resulted in his, or her, entering one store and paying 39 cents for an article which has been nationally advertised with no mention of price, and later making a second purchase in another store and paying 50 cents? The second dealer may protest that 50 cents is the standard price and he

(Turn to Page 45)

A Soap Pioneer

**An Interview with Dr. T.M.
Sayman and a Story of the
Unusual Career of the St.
Louis Soap Manufacturer, a
Character Unique in Soap or
Any Other Industry**

By H. L. ZIMMER

EIGHTY-ONE years old and still going strong,—that is Dr. T. M. Sayman, St. Louis manufacturer of soaps whose unique method of doing things finds him much in the public eye. Not so many moons ago when a police officer shot it out with a holdup man and came out victorious, Dr. Sayman sent the officer a check for five hundred dollars to encourage the good work. His act and his comments at the time "made" probably every newspaper in the country. When newspaper men called on him, he mentioned his expectation of reaching the ripe age of 125 casually and demonstrated his hardihood in the most unusual manner. His collection of art treasures is large and beautiful. He even boasts to owning a stuffed horse,—one of the team which pulled him West in his rickety wagon. But with all his eccentricities, his reputation for kindness and philanthropy is widespread.

After graduating from medical school more than a half-century ago, young Sayman decided that the toilers of the plains needed soap more than they did medical attention. He headed west with a farm wagon drawn by two fine horses, a small amount of clothing and several copper soap kettles. He knew the art of soap making and his present-day business was founded on those copper kettles which he carted westward, making soap en route. His habit was to linger in a settlement long enough to gather fats and material for making soap. These he would prepare in his copper vats, and when the finished batch of soap was ready, he'd bundle up his equipment and, with his unusual merchandise, tour throughout the country selling it. Strange to say, he struck a responding chord, and his business grew tremendously. Folks who'd laughed at him began to wonder just where he would stop. . . .

"I soon decided," he relates now, "that running around the country selling my own stuff would never mean making much money. I had faith in soap, but knew I was going about it the wrong way. I picked St. Louis as being in the center of developments, and set up a small soap factory."

"Drummers, then the chief mode of selling, handled the selling end,—taking up the work where I left off. Selling in those days was a cross between a side show and a hog-calling contest. The fellow with the strongest pair of lungs usually got the business."

"I myself used to put on an act, with assistants. The coal-oil torches, a banjo player perhaps, and then—the great healer, Dr. Sayman,—" He laughed, reminiscent-

ly. "But it was all part of the game—and people wouldn't have had any faith in anything that was not so ballyhooed. Isolated as they were, from civilization, they welcomed the medicine man with his spiel and entertainment, and looked forward to his regular visits."

Starting with a small, store-like shop, the Sayman line of soap gradually became so in demand that larger space was required. This happened in increasing repetition, until the factory today is eight stories high, and takes up a half-block. Recently, at his 81st birthday party, Sayman stated that he intended to carry on his work for many more years. In fine physical condition, he does not look his age. "I fully expect to live to be 125," he says. "The secret of long life is in keeping all the body functions in good working order. My early days of living in the open air is standing me in good stead."

An enthusiastic collector of unusual things, he had present at the party the stuffed carcass of one of the horses that pulled him across the plains 50 years ago. Also, he has the original carriage in which he used to drum up trade.

So proud was he of his new factory building, that in 1910 he moved his family from their west-end home down to the building, the eighth floor of which he made over into luxurious living quarters. The other part of the family, however, was not to be swayed by such sentiment.

(Turn to Page 43)



New Products



The Great American Tea Company of New York puts two new detergent items on the market, Golden Key Washing Tablets and Golden Key Water Softener, both in sift-proof cellophane wrapping.



A metallic label on the bottle and the carton in silver finish to match makes a striking new package combination for Kelpex Shampoo of the Kelpex Laboratories of Seattle. The bottle is the imperial oblong design of Owens-Illinois.



Fashion Bouquet Soap in a gift box, to retail at fifty cents, is a recent item to be marketed by Shulton, Inc., New York. Made in four colors and four odors, orchid-lavender, blue-jasmine, green-gardenia, and pink-carnation.

and Packages

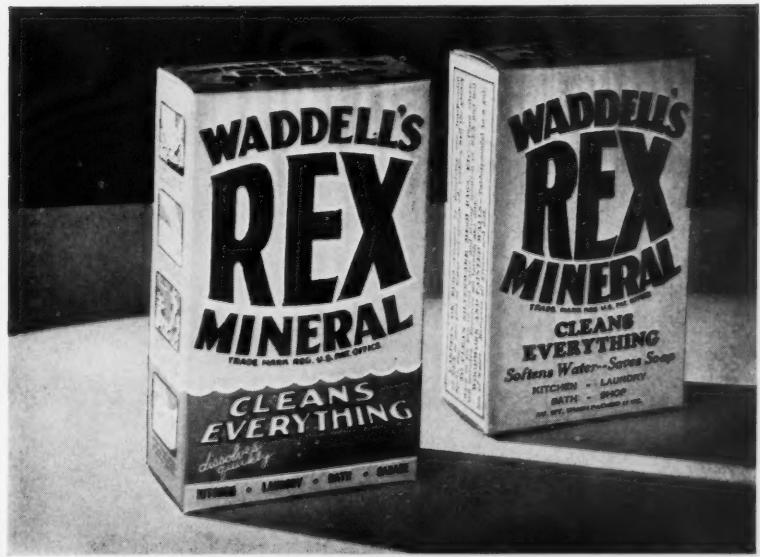


The new and the old in cartons for Waddell's Rex Mineral cleaning compound. The old orange and black carton has been in use for 15 years. The new is a varnished carton in orange, blue, and black, much improved but retaining the old motif. Made by Waddell's Rex Product Co., Chicago. Carton by Wolverine Carton Co. of Grand Rapids, Mich.



One of the new Colgate-Palmolive gift sets for men for the 1934 Christmas Trade,—leatherette finish case containing Palmolive Shave Cream, Palmolive Shave Lotion and Talc, Colgate Dental Cream, and Colgate Brushless Shave Cream. Priced to sell at a dollar.

Old Sol Cleanser and Disinfectant of the Solarine Company of Baltimore appears in a new specially molded bottle, a squatting elephant, tying in with their advertising. Bottle by Brockway Glass Company. The closures, a rubber stopper and white cap, by Armstrong Cork.



**THE SAME
RESULTS AT
ONE QUARTER**

THE COST
with

**FRITZSCHE'S
OIL OF LAVENDER
SYNTHETIC NO. 275**

With the dollar at its present rate of exchange and genuine lavender prohibitively priced, many soap manufacturers have been forced to resort to cheaper lavenders which are adulterated and of inconsistent strength. To these manufacturers we offer our Lavender Synthetic #275 for about one quarter the price of a good grade of Distilled Lavender Oil. • Uniform in every shipment and possessing all the true fragrance and strength of Oil of Lavender of high ester content, our Synthetic #275 is closer in odor to the natural product than most of the so-called pure commercial grades and can be used for entirely replacing Lavender Oil or as an admixture.

Write today for samples and complete information.

"Fragrance Creates Sales Appeal"

FRITZSCHE

Brothers, inc.

164 SO. CENTRAL AVENUE, LOS ANGELES, CAL.

Proprietors of PARFUMERIES de SEILLANS, Seillans, France

FRITZSCHE BROTHERS, of Canada, Ltd., 77-79 Jarvis St., Toronto, Canada

78-84 BEEKMAN STREET

NEW YORK N. Y.

118 WEST OHIO ST. CHICAGO, ILL.

ERRORS IN LEVER STRIKE REPORT

In reporting the settlement of the strike at the Hammond, Indiana, plant of the Lever Brothers Co. in the October issue of *Soap*, it was stated that most of the workers' demands were met and that higher wages were left to arbitration between the company and union officials. An editorial in the same issue expressed astonishment at this reported "victory" of the union in settling the strike, and the fear that it might be the forerunner of other soap plant strikes. The reports on which both the news article and the editorial were based, were incorrect.

Bruce Vernon, manager of the Hammond plant, in a letter to *Soap*, emphatically stated that there was no arbitration of wages, or change in working conditions, and that the strikers went back to work on exactly the same basis on which they went out.

DISCUSS SOAP CODE STATUS

The disputed status of soaps under the grocery and drug codes was discussed before the National Recovery Administration at an open hearing in Washington, October 23. C. H. Janssen of the National Food and Grocery Distributors Code Authority proposed an amendment to the drug code under which only soaps which move naturally through drug channels would be subject to that code, while the remainder would be classified under the grocery code. He brought out in support of this plan that by far the largest amount of soap sold moves through grocery stores, including many toilet soaps. Paul S. Willis, president of the Associated Grocery Manufacturers of America, spoke along the same line.

The other side of the controversy was presented by W. Bruce Philip, counsel for the National Association of Retail Druggists, who argued that to take soap out of the drug code would force down the price until it would be impossible to handle it without selling below cost. Wheeler Sammons, of the National Retail Drug Code Authority, seconded this view, warning that if soap is removed from the drug code it will become "the worst football in the history of the trade." Following the hearing the NRA sought the opinions of representative soap makers on this subject. After these have been given consideration the decision will be announced.

Dr. H. E. Whitmire, formerly manager of the Research Division of Insecticides and Animal Diseases for Ralston Purina Mills, St. Louis, has become associated with the Thorocide Incorporated, St. Louis, manufacturers of rotenone concentrates for cattle, household and agricultural sprays.

Employes of Procter & Gamble Co. at the Ivorydale, Ohio, plant have chosen John Robinson as their representative on the board of directors of the company for the coming year. Two other representatives of workers from the Kansas City and New York plants will also attend monthly board meetings.

PALMOLIVE SUES BRITISH SOAPER

In the British Chancery Court, Colgate-Palmolive-Peet, Ltd., London, is suing Ophir Soap Works, Samuel Kitter, and Eric James Clark, for an injunction restraining alleged "passing-off." Plaintiffs allege that salesmen had been engaged in house-to-house peddling of soap in cartons bearing the words, "Palm & Olive." Evidence of householders was offered to show the soap was offered as genuine Palmolive Soap. Counsels for defendants denied that their soap bore any resemblance to the plaintiffs'. Defendants' soap was household soap, while plaintiffs' was toilet soap, he contended. Neither the soap nor the cartons were in any way similar. Counsel for plaintiffs said he was not moving against Henry Green, Ltd., who had been joined as defendants in the action as manufacturers of the soap in question.

MACY OFFERS WHITE "HEALTH SOAP"

Advertisements offering "Health Soap" in white as well as red color, but with "the same clean, purifying odor," by R. H. Macy & Co., New York department store, have appeared in the daily papers recently. The reasons for offering white "health soap" in addition to red are given in the advertisements as follows: "Maybe, we thought, red clashes with some bathrooms. Maybe if we made up the same soap in white, we'd sell even more. So here it is . . . 12 cakes for 38c." Macy is one of the largest sellers of private brand soaps in the country.

American Cyanamid Co. and Pittsburgh Plate Glass Co. opened their new jointly owned plant at Corpus Christi, Texas, on October 26. Over four hundred guests assembled in Corpus Christi for the occasion, the program for which included a trip of inspection to the new plant by an official party followed by an Industrial Banquet at the Plaza Hotel.

Procter & Gamble Co. is reported to be moving toward a test of the validity of Section 7-A of the National Recovery Act on the Pacific Coast. The Los Angeles regional labor board has ruled that a union has the right to represent all employees of the company at the coast plant. The company is calling for a rehearing with the intention of carrying the case to the Federal courts if necessary.

Marvelene Co. has been organized in Grand Rapids, Mich., to manufacture soaps.

"Cuticura" soap, product of Potter Drug & Chem. Co., Malden, Mass., whose code status has been in dispute, by a recent ruling of the N.R.A. has been placed definitely under the Soap and Glycerine Code. It is believed that this decision may set a precedent for other medicated soaps. The Package Medicine Code Authority argued unsuccessfully that "Cuticura" should come under its jurisdiction.

Western Robe Mills, janitors' supplies, Chicago, have recently moved to 163 N. Curtis Street.

NAME PACIFIC COAST CCDE MEMBERS

The following have been approved by the N.R.A. as members of the trade practice complaints committee for the Pacific Coast section of the soap and glycerin manufacturing industry: A. Bloomberg, Miller Products, Inc., Los Angeles; A. L. Bobrick, Bobrick Manufacturing Corp., Los Angeles; A. F. Danz, Colgate-Palmolive-Peet Co., Berkeley; H. Feldman, Mt. Hood Soap Co., Portland; L. Fishbeck, Fishbeck Soap Co., San Francisco; B. F. Flynn, Pacific Soap Co., Los Angeles; C. E. Gordon, Gordon-Allen, Ltd., San Francisco; L. Hockwald, Hockwald Chemical Co., San Francisco; F. H. Merrill, Los Angeles Soap Co., Los Angeles; E. C. Moffatt, Procter & Gamble Co., San Francisco; S. B. Pigeon, Lever Brothers Co., San Francisco; C. A. Staco, Armour & Co., Los Angeles, and E. Westwood, National Soap Co., Tacoma.

P & G TO MODIFY "OLIVE" ON SOAPS

Procter & Gamble Co. has notified the Federal Trade Commission at Washington that it will discontinue using the words "olive" and "olive oil" in such manner as to give the impression that the product on which such names are used are composed entirely of olive oil when such is not the case.

The action of the soap concern followed receipt of a complaint from the Commission charging misleading advertising and unfair competition. By stipulation not to continue the practice complained of, the company avoids the publicity and expense of a public hearing. The stipulation provides that in the event the product is composed in substantial part of olive oil and the words "olive oil" are used to designate such product, then such words should be accompanied by some other word or words printed as conspicuously to indicate that the product is not composed 100 per cent of olive oil.

A. E. Staley Mfg. Co., Decatur, Ill., vegetable oils, is preparing to start construction of a new \$75,000 refinery unit.

SUM UP "RINSO" PATENT CASE

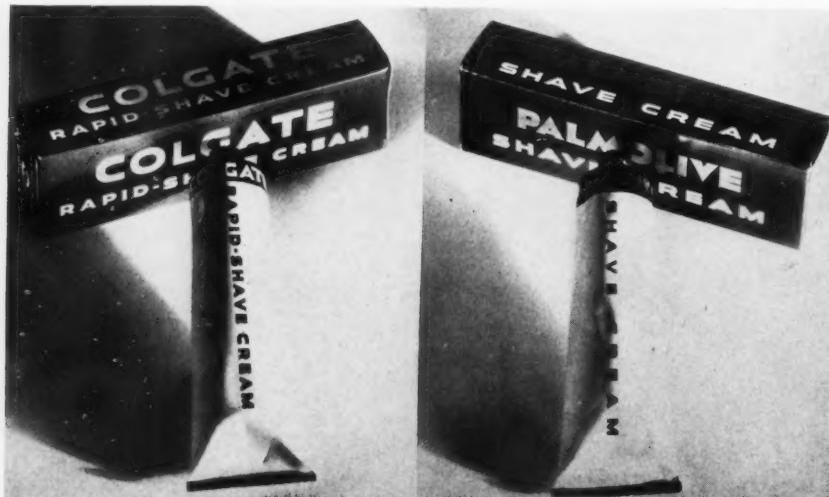
Attorneys for Procter & Gamble Co. and Colgate-Palmolive-Peet Co. in the patent suit involving Lever Bros. Co. and its product, "Rinso," have completed summing up their case before Judge Thomas W. Slick of the Federal Court for the Northern District of Indiana in South Bend, Ind. For over four weeks soap experts have been testifying in an attempt to decide whether "Rinso" infringes on the Lammont process for the manufacture of "Supersuds." Early in the trial the P. & G. and Colgate attorneys made it clear that they did not base any claims on the structure or form of the apparatus used in production of "Supersuds."

"It is not at all a question of apparatus," said Marsden Allen of Cincinnati, chief lawyer for the plaintiffs. "It is a question solely of process. We have never claimed to have used anything but existing apparatus. It was the discovery by Lammont of the requisite control that must be exercised in temperature of the soap, condition of the soap, temperature of the drying air, volume of the air, and the other variables named in his patent which produced the product then secured and which has been produced since each time that the same process has been used."

The Lever defense, headed by Ramsey Hoguet of New York, was equally insistent that the question involved was use of old apparatus, "which had all of the variables needed to produce the product which our opponents claim was a new product. We have shown the court that apparatus used by Robert L. Holliday and Dallas R. Lammont had been used for some time in the spray-drying industry; that products of many kinds and forms had been produced, including soap products. It is for the court to decide whether the use of that apparatus to produce the product known as the Lammont product, constitutes invention. We claim it does not."

Mr. Allen argued for the plaintiff that this did constitute invention, saying "that is what all process patents are based on. We claim that after all the failures to

(Turn to Page 99)



Tubes and cartons for both Colgate Rapid-Shave Cream and for Palmolive Shave Cream have been redesigned for Colgate-Palmolive-Peet Co. by Simon de Vauchier. The new designs are similar in motif, indicating that the two products belong to the same merchandise family. The designs have been simplified in a strong poster style, maintaining the same general color schemes of the old packages. A new giant size of both creams, holding twice as much as the regular twenty-five cent sizes, is now being introduced to sell for forty cents.

CHICAGO TRADE NOTES

CHICAGO Perfumery, Soap and Extract Association announce that the annual Christmas party will be held December 13th at the Knickerbocker Hotel, Chicago. Russell Brown is chairman of the committee making arrangements for the affair.

Seventy-three members attended the October 25th meeting of the Chicago Drug and Chemical Association at the Chicago Athletic Assn. Nick Kearns, prominent Big Ten football and basketball official, gave a very entertaining talk regarding some of his experiences as an official during the last eighteen years. December 20th has been decided upon as the date for the annual Christmas party.

Frank Schwaber, chemist and soapmaker in the employ of the Green Oil Soap Co., died recently following a brief illness. Mr. Schwaber had been in the employ of the company for more than 25 years. He came to this country from Austria in 1908. He developed a formula for an antiseptic soap highly valued in the dressing of wounds. He arranged the soap-making exhibit in the Colonial Village at the World's Fair this year.

F. W. Fitch Co. of Des Moines are introducing a new latherless oil shampoo.

S. M. Kurrie, assistant sales manager for Armour Soap Works with headquarters in Chicago, has recently been appointed manager of the Washington, D. C. territory for the company.

Ralph D. Ferguson has been appointed sales manager of the T. B. Robertson Products Co., Chicago, manufacturers of soaps and disinfectants. He has been the company's representative in the Chicago area for the past 14 years. Prior to his connection with the Robertson Company, Mr. Ferguson was with the West Disinfecting Co.

Robert Groundwater, superintendent of soap production for Swift & Co., recently returned from an inspection trip of the company's eastern plants.

The soap exhibit in the Colonial Village at the World's Fair has been moved to the Rosenwald Industrial Museum in Jackson Park where it will become a permanent exhibit.

Savon Cadum, French toilet soap, is being actively merchandised in the Chicago area by the Liggett Drug Stores. A box containing three cakes is sold at a price said to be comparable with the cost of the leading brands of American toilet soaps.

CAUTION IN PAYING CODE ASSESSMENTS

In order that soap manufacturers who also make other products may not pay assessments under codes of industries other than the soap industry unless they are legally required to do so, the Association of American Soap and Glycerine Producers has issued a statement covering the subject. Several inquiries have been received by the Association and in order to clear up any misunderstanding, it states:

"Soap manufacturers who, because of some other products made by them and coming within the definitions of other industries, receive notice of assessment from Code Authorities of such industries, are reminded that three important conditions must be met by said Code Authorities before the soap manufacturer will be required to pay assessments on such other products made by him. The conditions are:

(a) The Code of Fair Competition covering other than the principal line of the manufacturer must specifically give the Code Authority power to assess members of the industry for necessary administrative expenses (many Codes do not give such power);

(b) The N.R.A. must formally approve an itemized budget of such administrative expenses, and an equitable basis of contribution thereto; and

(c) The Code Authority seeking to levy assessments on manufacturers whose principal line of business comes under the code of Fair Competition of Soap and Glycerine Manufacturing Industry, must secure the termination of the exemption granted in Paragraph III of N.R.A. Administrative Order X-36.

"Soap manufacturers receiving assessment notices from Code Authorities of other industries should require proof that all three of these conditions are fully met. Until they are met, no one whose principal production is soap or soap products, can be compelled to pay any assessment for Code administration in another industry.

"It will be recalled that Paragraph III of N.R.A. Order X-36 provides that :Pending determinations by N.R.A. with respect to specific Codes upon cause shown by a Code Authority or otherwise, every member of a trade or industry is hereby exempted from any obligation to contribute to the expenses of administration of any Code or Codes other than the Code for the trade or industry which embraces his principal line of business, provided that he shall submit such information and comply with such regulations with respect to such exemption as N.R.A. may require or prescribe."

Ertel Engineering Corp., New York, has moved its office from 105 E. 16th Street to 120 E. 16th Street, where 1200 square feet will be occupied. The plant will be continued at the old address where the office space was needed for factory expansion. This is Ertel's third move in a period of two and a half years since the firm was organized to manufacture liquid handling equipment. Their line includes portable mixers, glass lined tanks, bottle fillers, filters, etc.

HEPTYLLYS B

is rapidly being recognized as one of the outstanding aromatic chemicals now being offered to the perfume and soap manufacturers. The reasons for this recognition are that Heptyllys B has a definite, flowery note—a lasting odor—blends readily with other aromatics in compounds—has a greater odor volume than other aromatic chemicals in the same price and odor class—and will not discolor.

Heptyllys B is our trade name for a purified Alpha-Amyl-Cinnamic-Aldehyde.

Upon request we will be glad to submit samples of Heptyllys B.

The Naugatuck Chemical Company

Aromatics Division

1792 BROADWAY



NEW YORK, N. Y.

PERSONAL AND IMPERSONAL

Howard E. Schaninger, general manager of B. J. Howard, Inc., soap powder, Baltimore, announces removal of the plant to 327 Guilford Ave. where additional facilities are available.

J. D. Hammett, Jr., formerly division manager at Kansas City, Mo., for White King Soap Co. of Los Angeles, has recently been named supervisor of sales for the state of Texas.

Earl H. Daniel, president of Elmira Soap Products, Inc., Elmira, N. Y., announces the appointment of Z. Nespor as general business manager and secretary-treasurer of the company. Mr. Nespor is an advertising man and formerly managed the Elmira Community Service.

American Chemical Products Co. has been organized in Des Moines as a subsidiary of F. W. Fitch Co. to manufacture and distribute cleaning compounds, hand soaps, disinfectants, waxes, etc. A fly spray, "Kill-Kwick," is already on the market. Lucius Fitch, the youngest son of F. W. Fitch, heads the company. R. H. Young, factory superintendent of the Fitch Co., is secretary-treasurer of American Chemical Products Co.

Colgate-Palmolive-Peet Co. is remodeling one of its buildings at the Jeffersonville, Ind., soap plant, putting in new steel and frame construction at a cost of about \$20,000, as an addition to the laundry soap department. J. D. Jennings Co., Louisville, was awarded the construction contract.

To celebrate the jubilee of Sunlight Soap, Lever Bros., Ltd., Port Sunlight, England, are making two special premium offers, a powder bowl with an embossed lid, and a decorated fruit or salad bowl. They are given in exchange for 15 Sunlight carton fronts purchased between August 1 and December 8. The offer closes December 12.

"Dijit" hand soap is a new product recently introduced by Durwyllan Co., Paterson, N. J., makers of brake linings. The new soap product is packaged in shaker top cans and is also offered in bulk for industrial use.

The time for the filing of briefs in the hearing on the constitutionality of the Maine Cosmetic Law has been extended until November 15 at the request of the State Attorney-General. It is therefore probable that no decision in the matter will be reached by the court before January 1.

Los Angeles Soap Co. has announced a new health soap which will be sold under the name "A Plus." It is a five-cent seller and will be aggressively advertised and merchandised on the coast. "A-Plus" is said to be made from an imported oil, for which the Los Angeles Soap Co. has exclusive U. S. rights.

Texas Soap Manufacturing Corp. has been incorporated in Houston, Texas, by W. S. Cochran, W. A. Paddock and J. W. Sartewelle. Capitalization is \$3,000.

The memorial to Lord Trent, founder of the great English firm of Boots, soap and toiletry manufacturers and operators of the world's largest drug store chain, was recently reconsecrated by the Bishop of Winchester. It is in the form of the complete renovation, including a new organ and bells, of St. Matthew's Church, Milbrook, Jersey, one of the Channel Isles.

Procter & Gamble have recently been featuring a galvanized wash tub as a premium in certain districts. One offer included one large "Chipso," two bars of "Camay," one medium bar of "Ivory," one "Lava," one medium package of "Ivory Flakes," six bars of "P & G" and the "Modern Midget" tub, itself valued at 69c., for a total of 89c. The sale is advertised as a \$1.25 value.

Armour & Co., Swift & Co., Wilson & Co. and Cudahy Packing Co. have recently put into effect wage increases which average eight per cent and add almost ten million dollars yearly to the payrolls of the four companies.

H. & H. Cleaner Co., Des Moines, maker of a well-known rug cleaning soap, is this year celebrating its forty-fifth anniversary. J. H. Chateauvert is the present head of the company which was originally organized by T. W. Henry.

Fred Becker is organizing the Becker Soap Co. at Cynthiana, Ind. The concern plans to manufacture soap powders as well as other related soap products.

Soap as an advertising medium was used with good effect by the *Chicago American* to build up interest in its highly publicized serial, "Anastasia," which was recently announced. To call attention to this love story built around a beauty parlor the publishers distributed free 25,000 small cakes of "Anastasia" beauty soap. The wrapper gave the first indication that "Anastasia," which had previously been brought before the public in "teaser" copy, was to be a serial.

SOAP presents a *perfuming problem* of a special character. To handle it successfully requires intimate knowledge of soap manufacturing and, above all, experience with soap perfumes.

We have done a considerable amount of work along those lines, and offer several series of soap perfumes of *tried worth*.

Send for *smelling samples*.

Almond	Lemon
Almond—Rose	Lilac
Almond—Cocoa	Lily
Antiseptic Odor	Mint *
<i>Bouquets of great variety</i>	
Carnation	Narcissus
Cedar	Orange
Citrella	Oriental
Cologne	Patchouly
Fougere	Pine
Gardenia	Pineapple
Geranium	Rose
Girella	Sandalwood
Jasmin	Sweet Pea
Lavender	Verbena
	Violet

Also many odors for shampoo and liquid soap

van Ameringen-Haebler, Inc. *Aromatic Essentials*

315 Fourth Avenue, New York

180 No. Wacker Drive, Chicago

438 West 48th St., Los Angeles

42 Wellington Street, E., Toronto

Factory, Elizabeth, N. J.

Dr. J. S. Goldbaum, vice-president of Fels & Co., Philadelphia, died Nov. 5 in that city after a prolonged illness. Dr. Goldbaum was treasurer of the Association of American Soap and Glycerine Producers and active in its affairs up until a year ago when ill-health forced him to retire from all business activities. He played a prominent part in writing the soap industry code. He was forty-eight years of age and a graduate of the University of Pennsylvania. Funeral services were held from his home in Philadelphia on Nov. 7. A number of prominent representatives of the American soap industry were present.

Tremco Manufacturing Co., Cleveland, has recently added a soap manufacturing department which will manufacture high grade commercial soaps for sale exclusively to the jobbing trade. George Wiley, Sr., will be in charge of manufacturing operations and George Wiley, Jr., will be in charge of sales.

American Products Co., Cincinnati, parent of the Zanol Products Co., drugs and cosmetics, has proposed a plan of recapitalization which if accepted will wipe out accumulated dividends on the present cumulative preferred stock.

At the October 24 meeting of the board of directors of Colgate-Palmolive-Peet Co. an extra dividend of 25c. a share was declared on the common stock in addition to the regular dividend of 12½c. Both are payable December 1 to holders of record November 8. It was felt that the extra dividend was justified on the basis of actual earnings to date and estimated earnings for the rest of the year.

The Association of Canadian Perfumers and Manufacturers of Toilet Articles is scheduled to meet in the Royal York Hotel, Toronto, Ont., Canada, December 3.

Ralph F. Rogan, Procter & Gamble Co., was elected to membership on the Advertising Division of the Audit Bureau of Circulation at the recent annual convention.

Procter & Gamble Co. has recently been featuring a deal in the New York market, giving one ten cent package of "Ivory" soap flakes free with every purchase of the large 15-ounce box. The object of the offer was to get buyers used to keeping the small package in the bathroom handy for nightly cleansing of feminine apparel.

A. Joseph Ferolie has become New York representative for the J. T. Robertson Co. of Syracuse, N. Y. Formerly connected with the Palmolive Company and later with Kirkman & Sons, Mr. Ferolie has during the past few years been the head of the Joal Sales Co., New York,

manufacturers and distributors of special soaps. His number of years' experience in soap selling has all been spent in the Metropolitan area.

A new English soap concern known as the Universal Soap Co., Ltd., has been registered as a private limited company in London, with a capital of £20,000 (\$100,000), to adopt an agreement with Archibald Paterson and Frederick Orders, and to carry on the business of soap boilers and makers, dealers in oils, tallow, gums, detergents, seed crushers and manufacturers of linseed and other cakes.

Production on "Colgate's" new brushless shaving cream has been postponed until after the first of the year the company has recently advised.

Mathieson Alkali Works, New York, manufacturers of caustic soda, soda ash, H. T. H., and related products will move to the Lincoln Building about December 15th, where they will occupy the 46th, 47th, and 48th floors. The company has developed a new specialty for the sanitary supply trade, H. T. H. 15, which is intended as a China dip for use in hotels, restaurants, etc. This will be marketed as a companion product to their detergent briquettes used in dish washing machines.

Louis H. Waltke, formerly head of the William Waltke Co., St. Louis soap manufacturers, was married early this month to Mrs. Marie Francis, his former nurse. The retired millionaire soap manufacturer is 79 years of age and his bride 55.

R. R. Deupree, president of Procter & Gamble Co., spent a week in England early this month. A report from London stated that he was negotiating the purchase of a large British soap enterprise.

Association of American Soap & Glycerine Producers will hold its annual meeting on December 6 at the Waldorf-Astoria Hotel, New York, at 1:45 P. M., according to Roscoe C. Edlund, manager of the Association. All manufacturers who come under the soap and glycerine code, as well as regular members of the Association, are invited to attend.

No change in its previous ruling that producers of shaving soaps and shampoos come under the Soap and Glycerine Code has as yet been announced by the N.R.A. Several months ago a group of makers of these products met at the offices of the Cosmetic Code Authority and at that time decided to petition the N.R.A. to put these products under the Cosmetic Code. If such action should be taken it would be a reversal of a previous decision made by the N.R.A. in an official interpretation of the Soap and Glycerine Code, in which producers of soap base shaving creams and shampoos were definitely classed as coming under the Soap and Glycerine Code.

RECORD OF TRADE-MARKS

The following trade-marks were published in the October issues of the *Official Gazette* of the United States Patent Office in compliance with Section 6 of the Act of September 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of publication. As provided by Section 14, fee of ten dollars must accompany each notice of opposition.

TRADE MARKS FILED

ALL-SHINE—This on reverse plate describing shoe polish. Filed by Manhattan-Kreole Products, Inc., New York, Mar. 28, 1932. Claims use since Feb. 2, 1932.

ACE—This in solid letters with sketch of aeroplane describing soaps and shaving cream. Filed by Ace Mfg. Co., Chicago, Feb. 28, 1933. Claims use since Jan. 16, 1931.

DART—This in solid letters with arrow, against circular background, describing hand cleansing paste. Filed by S. H. Kress & Co., New York, Aug. 9, 1933. Claims use since May 17, 1933.

REGAN'S (Hi-TEX)—This in solid letters describing shoe polish and cleaner. Filed by Wm. A. Regan, Washington, Apr. 12, 1934. Claims use since Mar. 2, 1934.

E Q P—These letters arranged to form a monogram describing soaps. Filed by Frank R. Eager, Wilmette, Ill., May 12, 1934. Claims use since Apr. 16, 1934.

FERROLITE COMPOUND—This on reverse plate describing cleaning compounds. Filed by Ferro Enamel Corp., Cleveland, Aug. 1, 1934. Claims use since July 17, 1934.

OMAR—This in shaded script describing wall-paper cleaner. Filed by Omar Products Co., Columbus, Ohio, Aug. 1, 1934. Claims use since June, 1934.

ROLLSO—This in solid letters describing hand cleaner. Filed by Rollso Products Co., New York, Aug. 10, 1934. Claims use since Aug. 3, 1934.

REST IN PEACE—This in solid letters describing insecticide. Filed by Bartedes Seed Co., Lawrence, Kans., June 22, 1934. Claims use since May 16, 1934.

ZIBORAL—This in solid letters describing antiseptic. Filed by Table Rock Laboratories, Greenville, S. C., July 30, 1934. Claims use since July 9, 1934.

BIODONE—This in solid letters describing germicides, antiseptics, etc. Filed by Iodine Pharmacal Co., New York, Aug. 15, 1934. Claims use since May, 1934.

DR. MILLER'S DENTAL-TEEN—This in solid letters describing tooth powder. Filed by Dental-Teen Laboratories, Los Angeles, Aug. 17, 1934. Claims use since July 25, 1934.

GRANDPA'S WONDER—This in solid letters with sketch of old man describing soaps. Filed by Beaver-Remmers-

Graham Co., Cincinnati, July 25, 1934. Claims use since Jan. 1, 1886.

CLORO-BRITE—This in solid letters describing detergent. Filed by Blue Heaven Corp., North Kansas City, Mo., Aug. 2, 1934. Claims use since May 1, 1934.

SIR—This in solid letters describing soaps and shaving cream. Filed by Paul Peter Mulhens, Cologne, Germany, Aug. 10, 1934. Claims use since Feb. 18, 1933.

MAID BRITE—This in solid letters with silhouette of girl on globe, describing soap. Filed by Dacar Products Co., Canton, Ohio, Aug. 11, 1934. Claims use since Apr. 3, 1934.

NUTRALIN—This in solid letters describing floor cleaner. Filed by Paper Makers Chemical Corp., Wilmington, Aug. 22, 1934. Claims use since July 25, 1933.

RAT-EX—This in outline letters describing rodent poison. Filed by L. G. Chemical Co., Council Bluffs, Iowa, July 9, 1934. Claims use since Dec. 15, 1933.

MOFF—This in solid letters describing moth preventive. Filed by Sydney B. Dunn, Phila., July 23, 1934. Claims use since June 10, 1934.

L T 60—This in shaded letters describing cleaning compound. Filed by M. Werk Co., St. Bernard, Ohio, Aug. 30, 1934. Claims use since July 19, 1934.

BI-BORA—This in solid letters describing tooth powder. Filed by A. B. Ward, Los Angeles, June 15, 1934. Claims use since June 28, 1933.

MOTHEX—This in solid letters describing insecticide. Filed by Finishine Laboratories, Syracuse, N. Y., July 6, 1934. Claims use since Apr. 2, 1934.

GERALD LABORATORIES—This in solid letters on seal describing antiseptic. Filed by Gerald Laboratories, New York, July 6, 1934. Claims use since Dec. 10, 1930.

MALIUM—This in solid letters on arrowhead describing fumigant. Filed by Michigan Alkali Co., Wyandotte, Mich., Aug. 2, 1934. Claims use since July 1, 1933.

FLEET-WING—This in solid letters with silhouette of bird in flight, describing soap, cleansers and polishes. Filed by Fleet-Wing Corp., Cleveland, July 21, 1934. Claims use since November, 1923.

CERTISAN—This in solid letters describing shaving cream. Filed by Wm. A. Webster Co., Memphis, Sept. 10, 1934. Claims use since June 28, 1934.

HYCISAN—This in solid letters describing shaving cream. Filed by Wm. A. Webster Co., Memphis, Sept. 10, 1934. Claims use since June 28, 1934.

SANIKOOL—This in solid letters describing shaving cream. Filed by Wm. A. Webster Co., Memphis, Sept. 10, 1934. Claims use since June 28, 1934.

SANIPURE—This in solid letters describing shaving

cream. Filed by Wm. A. Webster Co., Memphis, Sept. 10, 1934. Claims use since June 28, 1934.

ATSOL—This in solid letters describing soap. Filed by Atsol Products Co., Baltimore, Sept. 18, 1934. Claims use since June 1, 1934.

STA-WEL—This in outlined solid letters describing tooth powder. Filed by Bertram Ball, Yonkers, N. Y., May 17, 1934. Claims use since Mar. 1, 1934.

CLYMIS—This in solid letters describing dental powder. Filed by Merck & Co., Rahway, N. J., Aug. 17, 1934. Claims use since Aug. 10, 1934.

ERUSTICATOR—This in script describing cleaner. Filed by Sterling Products Co., Easton, Pa., Sept. 1, 1934. Claims use since Dec. 14, 1909.

SANITOX—This in solid letters describing insecticides. Filed by Western Chemical Co., St. Joseph, Mo., Sept. 7, 1934. Claims use since Aug. 4, 1926.

SUNNY SMILE—This on circular reverse plate describing tooth paste. Filed by Charles G. Algase, Phila., Sept. 11, 1934. Claims use since Sept. 1, 1934.

VITA SHINE—This in solid letters describing shoe polish. Filed by Consolidated Products, Inc., Raleigh, N. C., Aug. 3, 1934. Claims use since July 2, 1934.

NYKO CLEANSING POWDER—This in solid letters describing cleansing material for dental plates. Filed by Nyko, Inc., Chicago, Aug. 10, 1934. Claims use since June 18, 1934.

PERSISTENCE—This in solid letters describing dentifrices. Filed by Lentheric, Inc., New York, May 10, 1934. Claims use since May 4, 1934.

ODORITE—This on carton describing deodorant block for refrigerator use. Filed by Odorite Products Co., Emporia, Kans., June 12, 1934. Claims use since Feb. 25, 1933.

RATMORT—This in solid letters describing rodent exterminating preparation. Filed by West Disinfecting Co., L. I. City, N. Y., Aug. 20, 1934. Claims use since February, 1934.

BASUL—This in solid letters describing insecticides. Filed by Sherwin-Williams Co., Cleveland, Aug. 24, 1934. Claims use since Aug. 7, 1934.

LIQUICIDE—This in solid letters describing insecticides. Filed by Leffingwell Rancho Co., Whittier, Cal., Aug. 27, 1934. Claims use since June 28, 1934.

VIGROCIDE—This in solid letters describing insecticides. Filed by Leffingwell Rancho Co., Whittier, Cal., Aug. 27, 1934. Claims use since June 28, 1934.

— • —

TRADE MARKS GRANTED

317,585. Shaving Soaps. Kempton Corp., Westport, Conn. Filed April 11, 1934. Serial No. 349,855. Published July 24, 1934. Class 4.

317,586. Liquid Chemical Deodorizer, Cleaner, Disinfectant. Strong, Carlisle & Hammond Co., Cleveland. Filed April 9, 1934. Serial No. 349,717. Published July 24, 1934. Class 6.

317,647. Shampoo. Specialty Laboratories, Inc., Chi-

cago. Filed June 6, 1934. Serial No. 352,334. Published July 24, 1934. Class 6.

317,660. Insecticide and Fungicide. George Leone, Lakeland, Fla. Filed May 16, 1934. Serial No. 351,412. Published July 24, 1934. Class 6.

317,664. Silver Polish, Metal Polish, and Rug Cleaner. Lewis Products Co., New York. Filed May 18, 1934. Serial No. 351,501. Published July 24, 1934. Class 4.

317,671. Cleaning Preparations. Jackson Products Co., Pittsburgh. Filed May 9, 1934. Serial No. 351,115. Published July 17, 1934. Class 4.

317,672. Liquid Antiseptic and Germicide. North Metal & Chemical Co., York, Pa. Filed May 9, 1934. Serial No. 351,131. Published July 24, 1934. Class 6.

317,677. Chemicals for Sanitary Toilets, Sewage Disinfecting, Cesspool and Pipe Cleaning, and for Destroying Weeds. Kaustine Co., Perry, N. Y. Filed June 2, 1934. Serial No. 352,190. Published July 17, 1934. Class 6.

317,678. Insecticide. E. F. B. Laboratories, Kansas City. Filed June 4, 1934. Serial No. 352,236. Published July 17, 1934. Class 6.

317,680. Grease Detergent and Solvent Cleaning Compounds. Rex Products & Manufacturing Co., Detroit. Filed May 19, 1934. Serial No. 351,581. Published July 24, 1934. Class 4.

317,695. Artificial Teeth Cleaning Compound. Kleenite Laboratories, Buffalo. Filed May 24, 1934. Serial No. 351,800. Published July 24, 1934. Class 4.

317,696. Insect Exterminating Compounds. Harry M. Epstein, New York. Filed May 24, 1934. Serial No. 351,802. Published July 24, 1934. Class 6.

317,727. Insecticides. Derris, Inc., New York. Filed June 1, 1934. Serial No. 352,132. Published July 17, 1934. Class 6.

317,744. Chemical Preparation for Removing Discoloration from Closet Bowls. Farilene Co., Jackson, Mich. Filed November 6, 1933. Serial No. 343,307. Published July 17, 1934. Class 6.

317,777. Shaving Cream. Moore Trading Co., Sulphur, Okla. Filed May 4, 1934. Serial No. 350,904. Published July 24, 1934. Class 4.

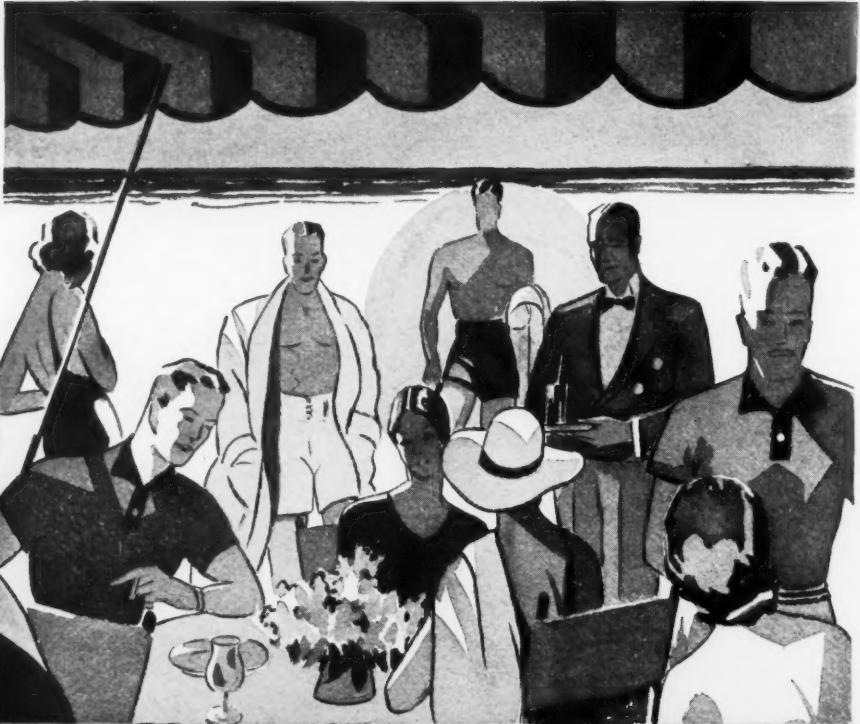
317,874. Cleaning and Polishing Compounds. Mellocraft Corp., Toledo. Filed May 13, 1933. Serial No. 337,795. Published July 24, 1934. Class 16.

317,953. Polishing Wax. E. S. Evans & Sons, Detroit. Filed June 9, 1934. Serial No. 352,476. Published July 31, 1934. Class 16.

317,960. Automobile Polish, Wax Polish, and Wax Cleaner. Western Auto Supply Agency of Los Angeles, Los Angeles. Filed June 11, 1934. Serial No. 352,565. Published July 24, 1934. Class 16.

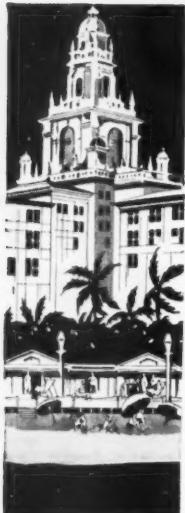
317,980. Soaps and Shaving Creams. Yardley of London, Inc., Union City, N. J. Filed June 14, 1934. Serial No. 352,702. Published July 31, 1934. Class 4.

318,011. Mouth Wash, Antiseptic, Bluing, etc.



RONEY PLAZA

MIAMI BEACH FLORIDA



Write or wire for
Literature, Information
or Reservations

EXCLUSIVE in its appeal, the Roney Plaza caters to those who value the graces and gayeties worthy of civilized tastes . . . who enjoy luxurious living without ostentation . . . who want the amiable fellowship of their equals, with the sheltered refinements of a private estate. The Roney Plaza is America's finest ocean front hotel . . . famous for the tropic beauty of its beach and grounds . . . for its sumptuous suites . . . thoughtful service . . . original cuisine . . . brilliant social life . . . and for its extraordinary guest courtesies. The Roney Plaza is Miami Beach at its best. Privileges include transportation by aerocar, autogiro or sea-sled to all amusements in this South Florida resort area . . . and guest membership in Roney Plaza Cabana Sun Club, Miami Biltmore Country Club and Key Largo Anglers Club.

AMERICA'S FINEST OCEAN-FRONT HOTEL

Pleezing, Inc., Chicago. Filed April 30, 1934. Serial No. 350,708. Published August 7, 1934. Class 6.

318,015. Cleaning and Polishing Compound. Columbus Cleaning Machinery Co., Columbus, Ohio. Filed April 16, 1934. Serial No. 350,014. Published August 7, 1934. Class 16.

318,042. Powdered or Granular Composition Adapted to be Mixed with Water to Form a Hand Soap Paste. Mix-It Hand Soap Co., West Somerville, Mass. Filed May 17, 1934. Serial No. 351,479. Published August 7, 1934. Class 4.

318,043. Powdered or Granular Composition Adapted to be Mixed with Water to Form a Hand Soap Paste. Mix-It Hand Soap Co., West Somerville, Mass. Filed May 17, 1934. Serial No. 351,478. Published August 7, 1934. Class 4.

318,093. Cleaning Compound. M. Werk Co., St. Bernard, Ohio. Filed June 27, 1933. Serial No. 339,290. Published August 7, 1934. Class 4.

318,095. Cleaning Compound. M. Werk Co., St. Bernard, Ohio. Filed June 27, 1933. Serial No. 339,292. Published August 7, 1934. Class 4.

318,096. Cleaning Compound. M. Werk Co., St. Bernard, Ohio. Filed June 27, 1933. Serial No. 339,291. Published August 7, 1934. Class 4.

318,097. Cleaning Compound. M. Werk Co., St. Bernard, Ohio. Filed June 27, 1933. Serial No. 339,289. Published August 7, 1934. Class 4.

318,098. Cleaning Compound. M. Werk Co., St. Bernard, Ohio. Filed June 27, 1933. Serial No. 339,288. Published August 7, 1934. Class 4.

318,100. Cleaning Fluid and Dry Cleaner, Shoe Polishes and Shoe Dressing. Nu-Di Products Co., Cleveland. Filed June 6, 1933. Serial No. 338,576. Published August 7, 1934. Class 4.

318,101. Insect Exterminator Powder or Compound. Edward Potter, Wilmington. Filed May 26, 1933. Serial No. 338,257. Published July 31, 1934. Class 6.

318,236. Cleaners, Polishes and Soaps. Jaburg Brothers, Inc., New York. Filed March 20, 1934. Serial No. 348,884. Published August 7, 1934. Class 4.

318,238. Tooth Paste. Western Co., Chicago. Filed March 19, 1934. Serial No. 348,858. Published August 7, 1934. Class 6.

318,294. Insecticides and Fungicides. Sherwin-Wiliams Co., Cleveland. Filed April 25, 1934. Serial No. 350,482. Published August 7, 1934. Class 6.

318,318. Cleanser. Sax-On Paint Stores, Chicago. Filed May 7, 1934. Serial No. 351,048. Published August 21, 1934. Class 4.

318,342. Shoe Polish. Old Dutch Industrial Products Co., Newark. Filed June 4, 1934. Serial No. 352,262. Published August 21, 1934. Class 4.

318,351. Bleaching Compounds. Edward Wesley Martin, Coral Gables, Fla. Filed June 6, 1934. Serial No. 352,302. Published August 14, 1934. Class 6.

New Patents

Conducted by
Lancaster, Allwine & Rommel

Registered Attorneys

PATENT AND TRADE-MARK CAUSES
815 15th St., N. W., Washington, D. C.

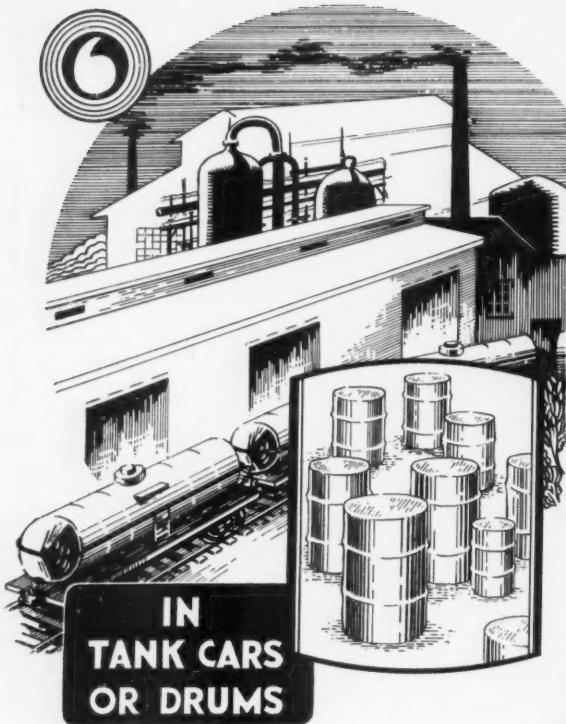
Complete copies of any patents or trade-mark registration reported below may be obtained by sending 25c for each copy desired to Lancaster, Allwine and Rommel. Any inquiries relating to Patent or Trade-Mark Law will also be freely answered by these attorneys.

No. 1,972,458, Dry Powdered Soap Composition, Patented September 4, 1934, by Leonard H. Phillips, Somerville, Mass. A soap composition in dry powder form adapted to form a homogeneous paste upon the addition of water, the composition containing a major proportion of powdered soap, sawdust in an amount sufficient to constitute an abrasive, sufficient vegetable oil to coat the sawdust particles to cause them to remain dispersed throughout the paste formed by the addition of water, an alkali such as caustic soda in an amount sufficient to render the oil water-miscible, and a neutralizing medium such as powderer rosin in an amount to neutralize the excess dissolved alkali in the paste.

No. 1,972,568, Method of Producing Phenylstearic Acid, Patented September 4, 1934, by Ralph H. McKee, New York, and Henry B. Faber, Brooklyn, N. Y. The improvement in the process of producing phenylstearic acid which comprises dissolving about 350 parts of anhydrous oleic acid in about 600 to about 900 parts of anhydrous benzol to form an anhydrous benzol solution of oleic acid heating the anhydrous solution to a temperature within a range of about 78° C. to about 80°C., gradually adding to the heated anhydrous benzol solution about 180 to about 200 parts of anhydrous aluminum chloride wetted with anhydrous benzol, and maintaining the anhydrous solution in a controlled heated condition.

No. 1,972,961, Disinfectant, Patented September 11, 1934, by Wendell H. Tisdale and Ira Williams, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. A disinfectant, useful as a bactericide, microbicide and fungicide, comprising a derivative of dithiocarbamic acid.

Imports are becoming a serious problem in Germany. For this reason advice on even household economy is offered. The following procedure is suggested to conserve materials used in the household laundry: Soak the wash in 25 liters of water to which 100 grams of calcined soda or its equivalent in other alkaline material is added. This is to soften the water and make it alka-



CAUSTIC POTASH

FLAKE
88/92%

SOLID
88/92%

LIQUID
45%

CAUSTIC SODA

FLAKE

SOLID

LIQUID

Uniform, dependable quality . . . unfailingly! Products of highest standard . . . backed by thorough service . . . yet priced to meet competition.

. . . for manufacturers of

- SOAPS
- OIL SOAPS
- LIQUID SOAPS
- DRY CLEANING SOAPS
- TEXTILE SPECIALTIES

Write for details and prices

JOSEPH TURNER & Co.
500 Fifth Avenue
New York
SUPPLIERS OF CHEMICALS
FOR OVER 70 YEARS

SEND FOR THIS

NEW BOOKLET



VICTOR
CHEMICAL WORKS
141 West Jackson Blvd.
CHICAGO

CONTRACTS AWARDED

Armour & Co., Chicago, was low bidder on 20,000 lbs. soap powder for U. S. Marine Corps, Washington, in a recent bidding, with a quotation of 2.435c. M. J. Ginsburg & Son, Washington, entered the low bid of 1.3c. per lb. on 3,000 lbs. sweeping compound. United Sanitary Co., Rosslyn, Va., with a bid of 4.5c. per lb. was low bidder on 5,075 lbs. soap chip.

R. M. Hollingshead Corp., Camden, N. J., was low bidder on 300 qts. furniture polish for U. S. Marine Corps, Washington, in a recent bidding, with a quotation of 13.5c.

B. P. Ducas was low bidder on 5 bbls. trisodium phosphate for U. S. Marine Corps, Washington, in a recent bidding, with a quotation of 2.68c. per lb.

Samuel M. Sher, Chicago Heights, Ill., has been awarded a contract to supply 150,000 lbs. laundry soap for the U. S. Army Quartermaster at St. Louis, the quotation being 2.79c. f.o.b. Chicago Heights. Day & Frick, Philadelphia, awarded 2,800 cakes grit soap, approximately 11 ozs. net, at a price of 2.35c.

A contract has been awarded to Sherwin-Williams Co. covering 2,000 gallons of floor cleaner for Post Office Department, Washington, at a price of 47c. a gallon.

Block & Co. have been awarded a contract covering 2,500 cans of tooth powder for Brooklyn U. S. Army Quartermaster at a price of 7c.

A. W. Barnes Soap Co. was recently awarded a contract covering 100,000 lbs. grit soap for Brooklyn U. S. Army Quartermaster at a price of 3.14c. R. M. Hollingshead Co. awarded 1500 cans liquid at \$1.775, 1,000 cans floor wax at 76c. and 10,000 cans metal polish at 5.48c. Day & Frick awarded 20,000 bars scouring soap at 2.9c.

The opening of five soap factories in Paris, Cynthiana, Carlisle, Falmouth and Williamstown, Kentucky, is said to be planned as a Federal Emergency Relief project. Under the plan 150 men would be employed with an annual payroll of about \$30,000. Local merchants would donate the materials for the soap, and relief officials already have pledges for scraps of meat, fat, tallow, etc. Under the plan the soap would be distributed to the needy.

Production in Canada of all kinds of soap during 1933, according to a Dominion Bureau of Statistics report, was

159,127,624 pounds worth \$12,268,376, at factory prices. Imports amounted to about 4,100,000 pounds at \$356.948, and exports were recorded at 8,631,702 pounds valued at \$604,728. The apparent consumption in Canada was about 154,600,000 pounds at \$12,020,596 which works out at approximately 15 pounds per capita or 68 pounds per family in 1933.

Miller Soap Products Co., Los Angeles, has moved to 1226 Factory Place.

A SOAP PIONEER

(From Page 27)

ment, and five years later found them in the west-end once more.

Probably because of his early struggles, he is today very proud of his house full of art treasures, famous pieces of historic furniture, paintings, silver sets. And on every article is a *price tag!* True, most of the things have been in the Sayman home for years, yet still one may find by examining the tags just what each piece cost.

He is particularly fond of a beautiful Egyptian rug in his library. "It cost me \$4.00 a square foot," he boasts. "Just think, \$2,000 for a rug,—just to walk around on!" But there is a twinkle in his eye and he smiles.

A habit acquired in drumming days, that of giving samples, still remains with Doctor Sayman. Much like another wealthy man who gives away shiny dimes. Sayman gives everyone he meets a bar of soap. His limousine is always loaded with soap, and Doctor Sayman, who is also fond of children, often orders his chauffeur to stop while he steps out and hands the delighted child a sample. If the mother is along, he will most likely say, "You shouldn't let such a tiny child walk too far—" or, "Don't pull her arm so high, madame,—how would you like to be tugged about like that?"

A philanthropist, he never talks about his gifts to others. In fact, he becomes shy and embarrassed when asked about them. An amusing incident of this shyness is best shown when the Roaring River Park episode is brought up:

Sayman bought up a beautiful piece of land, composed of trout streams, bathing beaches, and ideal picnic grounds, outside the city. It was 2,400 acres in area and cost \$105,000. The Doctor intended it for a state park, to be donated to the state of Missouri. As usual in cases of this kind, the donor is introduced to the Governor and a speech of some sort is supposed to be in order. Flustered and nervous, Dr. Sayman, as the day arrived for his presentation to the Governor, bought a

(Turn to Page 44)

Market Report on
TALLOW, GREASES, AND OILS

(As of November 7, 1934)

NEW YORK—After the sharp rise of recent months, prices of some soapmaking oils and fats eased off moderately this period. There was no indication that any reversal of the trend was in progress, the turn being rather in the nature of a technical reaction in particular items after so sharp an advance. Among the products to be quoted fractionally lower were coconut oil, grease, linseed oil, palm oil and tallow. On the other hand some soap fats continued their advance, these including corn oil, cottonseed oil, degras, and stearic acid.

COCONUT OIL

The copra and coconut oil markets were quiet and much easier this period than a month ago when a sharp upward movement sent prices up in a steep climb. Copra was off ten points this period and Manila oil was a quarter of a cent a pound lower at all delivery points. The current New York quotation on tanks is 3½c. lb.

CORN OIL

Corn oil continued strong this month, with mill tanks quoted at 8c. The offerings were light in spite of the higher figure.

COTTON OIL

Cottonseed oil moved into new high ground for the season this period, with offerings of crude light and increased speculative activity on the long side of the market. Crude is quoted currently at 7¼c. to 7½c. lb.

GREASE

Grease quotations eased off fractionally this period, with demand light in a quiet market. The current quotation on yellow and house grease is 4½c. to 4¾c. lb.

PALM OIL

Palm oil quotations were shaded this period, with the level for shipment oil dropping down to 3½c. lb., while spot oil dropped to 3¼c. lb.

TALLOW

The buying interest which was manifested in tallow last month was somewhat lacking this period, with the result that prices eased off considerably. City extra is quoted currently at 47½c. lb., a half cent below the high price of last period.

Werner G. Smith, president of Werner G. Smith Co., Cleveland, vegetable and fish oils, and Frank C. Haas, chemical director for the company, recently returned from Europe after a short trip.

Three employees were killed and four badly burned in a still explosion at the Ivorydale, Ohio, plant of Procter & Gamble Co., November 1.

Determination of Calcium Soaps on Textile Fibers was the subject of a paper before the Northern New England Section of the American Association of Textile Chemists and Colorists in Boston on November 16, by Dr. Bernard H. Gilmore of Mellon Institute of Industrial Research. Copies of the full paper may be secured from Mellon Institute.

A SOAP PIONEER

(From Page 43)

box of cigars to take to the official! "I have to have something to give him," he remarked, uneasily.

The hour approached, and Sayman was ushered into the Governor's private office. "Hello, Mr. Governor—I brought you some cigars."

"Oh—thank you, Doctor! You wanted—?"

"And they're very good cigars, too," the soap manufacturer hastened to say.

And so on. For almost a solid hour, Dr. Sayman kept up a continual conversation about cigars! From the time the first leaf is plucked, to the time the final match is struck,—he covered the ground completely, while the Governor nodded in agreement, smiling amusedly.

At last the clock hands pointed to the finish of the allotted hour. Sayman gathered his hat, gloves and cane together. "Oh, yes, Governor, I wanted to tell you that I'm giving the state a \$105,000 park. Will you accept it in the name of the people?" And receiving the Governor's agreement, he fairly fled from the office!

He is well known in St. Louis for his constant fight against criminals. He has long clamored for a law making it a capital offense for a bandit to accost a victim with a revolver. "If a bandit uses a gun to threaten a person," he states, "he is just as guilty as a man who murders. For that is the intention,—the promise of death if the person resists."

Recently, he went in person to the bedside of a wounded police officer, Captain Eugene Le Pere, and presented him with a check for \$500. The brave Captain had slain two bandits in a running gun-battle and received several bullet wounds himself.

This is the fifth such gift Sayman has made. In four other instances, men who have killed a burglar or hold-up man have been rewarded. Sayman has even gone so far as to offer to put up a \$1,000 fund for bandit-killers, if other business men will put in with him and make it worth-while.

Doctor Sayman has lived a full life, and is yet determined to do his bit toward making the world a better place to live in.

Market Report on

SOAP AND DISINFECTANT CHEMICALS

(As of November 8, 1934)

NEW YORK—The chemical market was busy this past month with 1935 price announcements and contracting for next year's requirements. Several price announcements affecting soap and disinfectant chemicals were made during the period, one of the most important being a reduction of half a cent a pound in the 1935 base price of naphthalene. At the same time it was announced that the 1935 contract schedule on paradichlorbenzene would be unchanged. Alkali prices have been out for about a month, and during that time producers have been soliciting 1935 business at unchanged prices with fair success. Crude glycerin was higher this period, presaging a further advance in refined.

ALKALIS

Announcement was made four weeks ago that soda ash and caustic soda prices would be unchanged during 1935, and ever since then producers have been engaged in closing up their contracts for the coming year. They are reported to be meeting with no unusual conditions and the annual contract drive is progressing normally. A new southern plant was put into operation this past month and next month further productive capacity in the southern district will be added.

NAPHTHALENE

Naphthalene prices for 1935 were announced recently, with the two developments here being a reduction of a half-cent a pound in the base price and the adoption of a half-cent differential between eastern and western deliveries. The eastern price on flake and ball is 5½c. in quantity and 5¾c. in 50 lb. cases, while the western price is 6c. per pound and 6¼c. in 50 lb. cases.

PARADICHLORBENZENE

The 1935 contract schedule on paradichlorbenzene has been announced as unchanged from 1934 prices. The range will thus be from 16c. per lb. for carlots of drums up to 25c. per lb. for odd lots of kegs.

GLYCERIN

The price of crude again advanced a quarter of a cent a pound this period, once more narrowing the margin between raw material and finished product to the point where refiners must look for higher prices for the refined product if they are to operate at a profit.

ROSIN

Rosin prices remained practically unchanged this period in a very quiet market.

The index of employment in the soap industry stood at 98.6 in September, 1934, unchanged from the August reading. This compares with a mark of 101.1 for Sep-

tember, 1933. The pay-roll index registered 87.3 in September, 1934, as compared with 86.1 in August and 80.4 in September, 1933.

The following have been named to membership on the code authority for the refined fish oil industry: Werner G. Smith, Ernest V. Moncrieff, Fred E. Loud, Louis J. Reizenstein and S. R. Kaas.

P. & G. REPORTS HEAVY VOLUME

Speaking before the annual meeting of the stockholders of Procter & Gamble Co., R. R. Deupree, president of the company, reported that the volume of business done in the year ended Oct. 1, 1934, approached close to the best year the company has ever had. Earnings also held up well, said Mr. Deupree, as he estimated that the net for the third quarter would figure about three and a half million dollars, or approximately the same average as for the year previous.

However, rising raw material costs, increased wages and sharply mounting taxes gave Mr. Deupree considerable concern. "All of the company's raw materials have advanced sharply in price," he said, "some having more than doubled in the past year. Wages have increased approximately 20 per cent.

"Taxes have assumed alarming proportions," he added. "We paid approximately \$3,800,000 in Federal taxes alone during the fiscal year 1933-1934. As nearly as we can estimate for the 1934-1935 fiscal year, they will mount to \$9,800,000, an increase of \$6,000,000. This is in addition to State taxes." Mr. Deupree also pointed to the processing tax of 3 cents a pound on coconut and certain other oils, which had meant a tremendous burden upon the soap industry.

Stockholders authorized an increase in the number of directors from 12 to 14, and elected F. M. Barnes and R. K. Brodie, vice-presidents, and F. F. Dinsmore, general counsel, to the board.

WHAT RETAIL PRICE?

(From Page 26)

cannot afford to sell for less. The consumer's resentment turns first against the retailer who doesn't cut prices. Next time his store is passed by. But what is the feeling toward the manufacturer whose goods are hawked at widely variant prices?

"Will not the reaction to an honest-to-goodness retail price naturally be greater consumer confidence in the manufacturer and his product? We do not know. But we think that both the retailer and the manufacturer will stand in a more favorable light."

for 96 years

Importers Dealers Brokers

*We have been supplying raw materials to the
Soap and Allied Industries*

OLIVE OIL, all grades OLIVE OIL FOOTS

Fatty Acids, Animal and Vegetable

Cottonseed Soapstock

Boiled-Down Cottonseed Soap

Neatsfoot Oil
Coconut Oil
Cottonseed Oil
Palm Kernel Oil
Stearic Acid
Oleo Stearine
Soya Bean Oil
Palm Kernel Oil
(English or German
Denatured)

Rapeseed Oil
(Undenatured)
Castor Oil
Sesame Oil
Lard Oil
Palm Oil
Corn Oil
Peanut Oil
Grease (Animal)

Tallow
Red Oil
Soap Colors
Chlorophyll
Soda Ash
Sal Soda
Talc

Trisodium Phosphate
Caustic Potash
Carbonate Potash
Bath Powder
Modified Soda
Caustic Soda
Silicate of Soda
Meta Silicate and
Metso

"CEREPS" Superfattening Neutralizing Agent

Write for Information and Samples.

WELCH, HOLME and CLARK CO., Inc.

563 Greenwich St.

New York City

Established 1838

GERANIUM ARTIFICIAL

Saves up to 50% in soap perfuming!

USE Geranium, Artificial, in place of or in combination with Geranium Oil and save up to 50% or more of your soap perfuming costs. Our Geranium, Artificial, has a very fine odor value and the same Rhodinol content as the pure oil. It is a completely satisfactory substitute. With Geranium prices high, this is the time to investigate this excellent product. May we submit samples and quotations?

POLAK'S FRUTAL WORKS, INC.

350 WEST 31st STREET, NEW YORK CITY

Perfuming Specialties for Soaps and Sanitary Products

Market Report on
ESSENTIAL OILS AND AROMATICS

(As of November 8, 1934)

NEW YORK—Mixed price movements again characterized the market for essential oils and aromatic chemicals this period, with no definite trend apparent and prices fluctuating with changing rates of exchange and the varying positions of suppliers. One of the features of the period was spike lavender oil which was quoted sharply higher. Cassia oil also showed strength as import costs mounted. These were the outstanding movements, with changes in other oils being of minor importance only. Buying proceeded at a satisfactory pace as compared with recent weeks.

ANISE OIL

Anise oil eased off a cent a pound this period on competition in spite of the somewhat firmer tone to the primary market. Stocks of lower priced oil still seem to be ample, so that the expected higher prices have not yet been forced.

BOIS DE ROSE

As demand for Brazilian oil continued good, prices advanced again. The inside price is now \$1.25. The market for cayenne oil was quiet, probably as a result of the substantially higher level of prices recently.

CANANGA OIL

In spite of the fact that replacement stocks of this oil have not yet been received to relieve the spot shortage, there was a certain weakness to prices this period traceable to slack demand. One supplier reduced his quotation to \$2.10, the inside price.

CITRONELLA OIL

With Java oil available at a price so close to that quoted on Ceylon oil, there has recently been less interest in the latter product, with more of the call going to the Java oil. Both were off a few cents in some quarters this period.

GERANIUM OIL

Geranium oil continues to be offered at an exceptionally wide range in price, with the range widening further this period. African oil is quoted from \$4.75 to \$7.25, with Bourbon oil at \$4.35 to \$6.50.

LAVENDER OIL

With replacement costs continuing to advance, the local market for spike oil was again exceptionally strong this period. Quotations were withdrawn entirely on one low price grade, bringing the inside figure up sharply. The better grades were also advanced, making the range now about \$1.20 to \$1.60, which represents a substantial advance from the levels prevailing a few months back. Production of lavender oil was at an exceptionally low level this past season and higher prices

are believed to be in prospect before next season's crop reaches the market.

Compagnie Parento Limited, 73 Adelaide Street West, Toronto has purchased the interests of Compagnie Parento of Canada as of October thirty-first. A. Doolittle is president, D. E. Picciano, vice-president and E. C. Barton, secretary-treasurer. In keeping with the firm's general policy and expansion program, additional facilities for the trade in other parts of the British Empire as well as Canada are now available from Toronto. E. C. Barton is general manager of Compagnie Parento Limited.

NAUGATUCK MAKES FRENCH CONNECTIONS

The Aromatics Division of Naugatuck Chemical Co., New York, manufacturers of aromatic chemicals, headed by Burton T. Bush, announces an association with two French perfume material organizations which will extend materially the company's service to soap and perfumery houses. New aromatic chemicals being developed by Laboratoires Louis Bornand, located near Paris, will be made available in the United States through Naugatuck Chemical. The latter concern's representative is now at the Bornand laboratories investigating new developments. In the future, Naugatuck will also market natural oils and other flower products produced by Societe Coloniale de Gerance et d'Etudes, an expansion of the well-known Grasse house of Bruno Court. In addition to products available in the Grasse district, the company obtains oils from its own plantations in the French colonies. The latter, which will be shipped direct to the United States, include geranium, ylang-ylang, vetivert and patchouli.

Felton Chemical Company has opened a branch in Philadelphia, located at 200 South 12th Street. The new branch will be in charge of H. F. Dresel, who, up to the present, has been connected with Felton's New York sales organization.

Budd Aromatic Chemical Co., New York, announces the appointment of J. Wilhelm as Chicago representative. Mr. Wilhelm is located at 38 S. Dearborn St., Chicago.

Norda, Ltd., Canadian branch of Norda Essential Oil & Chemical Co., New York, is now located in new and larger quarters at 60 Front Street, West, Toronto. Edward Stange is in charge of the Canadian office.

Dodge & Olcott Company, New York, has recently mailed the November-December revision of its price list covering essential oils, aromatics, etc.

WARNER

Quality

PIONEERED FOR NEARLY 50 YEARS



An opportunity to submit samples and quotations is solicited

WARNER
CHEMICAL COMPANY

Pioneer Producers 1886

CHRYSLER BUILDING
NEW YORK CITY

155 E. SUPERIOR ST.
CHICAGO

70 RICKARD ST.
SAN FRANCISCO

EXCLUSIVE SALES AGENTS for WESTVACO CHLORINE PRODUCTS, INC.



Controlled Production:

We collect, render and refine all of the raw materials used in our stearic acid and red oil. This close control, not available in any other brand, insures high quality products by eliminating low grade raw materials. Let us submit samples and prices. There is no substitute for quality. Use them in your

Dry Cleaning Soaps

Shaving Soaps

Special Cleaners

Polishes

Liquid Soaps

etc

FANCY - EXTRA and
SPECIAL TALLOW

Fatty Acids

THEOBALD
ANIMAL BY-PRODUCTS
REFINERY

KEARNY, N. J.

ESTABLISHED 1914

CURRENT PRICE QUOTATIONS

(As of October 8, 1934)

Minimum Prices are for car lots and large quantities. Price range represents variation in quotations from different suppliers and for varying quantities.

Chemicals

Acetone, C. P., drums.....	.08 1/2	.10
Acid, Boric, bbls., 99 1/2%.....ton	95.00	100.00
Cresylie, 97 1/2 dk., drums.....gal.	—	.55
97-99%, pale, drums.....gal.	—	.60
Oxalic, bbls.....lb.	.11	.11 1/4
Adeps Lanae, hydrous, bbls.....lb.	.14	.15
Anhydrous, bbls.....lb.	.15	.16
Alcohol, Ethyl, U. S. P., bbls.....gal.	2.45	2.69
Complete Denat., No. 5, drums., ex. gal.	.34	.42
Alum, Potash lump.....lb.	.03	.03 1/4
Ammonia Water, 260, drums, wks....lb.	.02 1/2	.02 1/4
Ammonium Carbonate, tech., bbls....lb.	.08	.12 1/2
Bleaching Powder, drums.....100 lb.	1.75	2.35
Borax, pd., cryst., bbls., kegs.....ton	50.00	55.00
Carbon Tetrachloride, car lots.....lb.	—	.05 1/4
L. C. L.....lb.	.06	.08 1/2
Caustic, see Soda Caustic, Potash Caustic		
China Clay, filler.....ton	10.00	25.00
Cresol, U. S. P., drums.....lb.	.11	.11 1/2
Creosote Oil.....gal.	.11 1/2	.12 1/2
Feldspar .....ton (200 to 325 mesh)	14.00	15.00
Formaldehyde, bbls.....lb.	.06	.07
Fullers Earth.....ton	15.00	24.00
Glycerine, C. P., drums.....lb.	.14	.14 1/2
Dynamite, drums .....	.13 3/4	.14 1/4
Saponification, drums .....	.09 3/4	.10
Soaps, Lye, drums.....lb.	.09	.09 1/2
Hexalin, drums	—	.30
Kieselguhr, bags	—	35.00
Lanolin, see Adeps Lanae.		
Lime, live, bbls.....per bbl.	1.70	2.20
Mercury Bichloride, kegs.....lb.	.93	1.08
Naphthalene, ref. flakes, bbls.....lb.	.05 1/2	.06 1/4
Nitrobenzene (Myrbane) drums.....lb.	.09 1/2	.11
Paradichlorobenzene, bbls., kegs.....lb.	.16	.25
Paraformaldehyde, kegs .....	.38	.39
Petrolatum, bbls. (as to color).....lb.	.01 1/2	.06 1/4
Phenol, (Carbolic Acid), drums.....lb.	.14 1/4	.16
Pine Oil, bbls.....gal.	.59	.65
Potash, Caustic, drums.....lb.	.06 1/4	.06 1/2
Flake .....	.07	.07 1/4
Potassium Bichromate, casks.....lb.	.08 1/4	.08 1/2
Pumice Stone, powd.....100 lb.	2.50	4.00
Rosins (600 lb. bbls. gross for net)—		
Grade B to H, basis 280 lbs....bbl.	5.35	5.70
Grade K to N.....bbl.	5.72	5.90
Grade WG and X.....bbl.	6.25	6.55
Wood	4.30	6.05
Rotten Stone, pwd. bbls.....lb.	.02 1/2	.04 1/2
Silica, Ref., floated	18.00	22.00
Soap, Mottled .....	.04 1/2	.04 1/2
Olive Castile, bars.....lb.	.13	.19
powder .....	.21	.25
Olive Oil Foot .....	.07	.07 1/2
Powdered White, U. S. P.....lb.	.16	.20
Green, U. S. P.....lb.	.06 1/2	.08
Tallow Chips .....	.06 3/4	.07 1/4
Whale Oil, bbls.....lb.	.05	.06
Soda Ash, cont., wks., bags, bbls. 100 lb.	1.23	1.50
Car lots, in bulk.....100 lb.	—	1.05
Soda Caustic, cont., wks., std.....100 lb.	—	2.60
Flake	—	3.00
Liquid, tanks	—	2.25

Soda Sal., bbls.....	100 lb.	1.10	1.35
Sodium Chloride (Salt).....ton	ton	11.40	14.00
Sodium Fluoride, bbls.....lb.	lb.	.07 1/2	.09 1/4
Sodium Hydrosulphite, bbls.....lb.	lb.	—	.22
Sodium Silicate, 40 deg., drum.....100 lb.	lb.	—	.80
Drums, 60 deg., wks.....100 lb.	lb.	—	1.65
In tanks, 15c. less per hundred, wks.			
Tar Acid Oils, 15-25%.....gal.	gal.	.21	.25
Trisodium Phosphate, bags, bbls....lb.	lb.	.03	.0355
Zinc Oxide, lead free.....lb.	lb.	.06	.06 1/4
Zinc Stearate, bbls.....lb.	lb.	.18	.19

Oils—Fats—Greases

Castor, No. 1, bbls.....	lb.	.10 1/4	.11
No. 3, bbls.....	lb.	.09 3/4	.10 1/2
Coconut			
Manila, tanks, N. Y.....	lb.	—	.03 1/4
Tanks, Pacific coast.....	lb.	—	.02 7/8
Drums	lb.	—	.04 1/8
Cod, Newfound, bbls.....	gal.	.40	Nom.
Copra, bulk, coast.....	lb.	.0155	.0157
Corn, tanks, mills.....	lb.	.08	Nom.
Bbls., N. Y.....	lb.	.09	.09 1/4
Cottonseed, crude, tanks, mill.....	lb.	.07 1/4	.07 1/2
PSY	lb.	—	Nom.
Degras, Amer., bbls.....	lb.	.03 3/4	.04 3/4
English bbls.....	lb.	.04 3/4	.05 1/2
German, bbls.....	lb.	.04 3/4	.05 1/2
Neutral, bbls.....	lb.	.09	.11
Greases, choce white, bbls., N. Y.....	lb.	.04 3/4	.05 1/4
Yellow	lb.	.04 1/2	.04 5/8
House	lb.	.04 1/2	.04 5/8
Lard, prime, steam, tierces.....	lb.	.08	.08 1/4
Compound tierces	lb.	.11 1/4	.11 1/2
Lard Oil,			
Extra, bbls.....	lb.	—	.08
Extra, No. 1, bbls.....	lb.	—	.07 3/4
No. 2, bbls.....	lb.	—	.07
Linseed, raw, bbls., spot.....	lb.	.0870	.0910
Tanks, raw	lb.	—	.0810
Boiled, 5 bbls. lots.....	lb.	—	.0990
Menhaden, Crude, tanks, Balt.....	lb.	.21	.25
Oleo Oil, No. 1, bbls., N. Y.....	lb.	—	.11 1/2
No. 2 bbls., N. Y.....	lb.	—	.11 1/4
Olive, denatured, bbls., N. Y.....	gal.	.84	.86
Foots, bbls., N. Y.....	lb.	.07 1/4	.07 3/8
Palm	lb.	.03 3/8	.03 1/4
Palm Kernel, casks, denatured.....	lb.	—	.02 7/8
Peanut, domestic tanks.....	lb.	.07 3/4	Nom.
Red Oil, distilled, bbls.....	lb.	.07 3/8	.08 3/8
Saponified, bbls.....	lb.	.07 3/8	.08 3/8
Tanks	lb.	—	.06 1/2
Soya Bean, domestic tanks, N. Y.....	lb.	—	.06 1/2
Stearic Acid			
Double pressed	lb.	.10	.11
Triple pressed, bgs.....	lb.	.12 3/4	.13 3/4
Stearine, oleo, bbls.....	lb.	.08 1/2	.08 3/4
Tallow, special, f.o.b. plant.....	lb.	—	.04 3/4
City, ex. loose, f.o.b. plant.....	lb.	—	.04 3/8
Tallow, oils, acidless, tanks, N. Y.....	lb.	—	.07
Bbls., c/l, N. Y.....	lb.	—	.07 1/2
Whale, crude	lb.	.03 1/2	.04
refined	lb.	.06 3/4	.07

BUILD BUSINESS UNDER YOUR LABEL

WE FURNISH THE LABELS WITH YOUR NAME IMPRINTED AT NO EXTRA COST

LIQUID SOAP BASE

Contains glycerine to give your finished product a smooth soothing effect to the skin.

LIQUID TOILET SOAP

Contains glycerine and gives a smooth soothing effect to the skin.

METAL POLISH

No harsh odor. Polishes easily and quickly. Pink color. Non-inflammable and non-settling.

PINE DISINFECTANT

Give a milk white emulsion in water. Has an unusual pleasant pine odor.

COAL TAR DISINFECTANT

Gives a milk white emulsion in water. Carbolic odor.

PINE FLOOR CLEANSER

A liquid floor cleanser having a fragrant pine odor. For cleaning glossy surfaces and linoleum, rubber, tile, etc.

Samples and prices upon request. Check items you are interested in and mail to

NEW YORK SOAP CORPORATION

294 PEARL ST., NEW YORK, N. Y.

OTHER QUALITY PRODUCTS

PINE DEODORANT CLEANSER
LIQUID SHAMPOO

COAL TAR DEODORANT CLEANSER
SHAMPOO BASE

OIL SOAP
SILVER POLISH

For Sale!

MODERN SOAP PLANT

A MODERN plant, fully equipped, located within 100 miles of four leading cities on the Eastern Seaboard. Consists of an office building and two plant buildings, 95,000 sq. ft. factory floor space, with railroad siding. Equipment consists of six large kettles, one medium and one small kettle (6,000 gal.), twelve storage tanks, 100 soap frames, four toilet soap mills, modern soap flake equipment, and various plodders, presses, cutter,

slabber, scales, motors, dryers, pumps, conveying and packaging equipment, etc.

Plant located in heart of well-populated district, no other soap plant in the locality. Market for raw materials is excellent. A completely equipped modern plant for a new business or a branch plant for a present manufacturer. Can be purchased direct from the owners on an extremely advantageous basis. For further details, communicate with

FACTORY OWNER : Box No. 450 : Care SOAP

136 LIBERTY ST., NEW YORK

(As of November 8, 1934)

Essential Oils

Almond, Bitter, U. S. P.	lb.	\$2.00	\$2.50
Bitter, F. F. P. A.	lb.	2.25	2.75
Sweet, cans	lb.	.60	.65
Anise, cans, U. S. P.	lb.	.41	.45
Apricot, Kernel, cans	lb.	.26	.27
Bay tins		1.25	1.50
Bergamot, coppers	lb.	1.40	1.70
Artificial	lb.	1.00	1.30
Birch Tar, rect., tins	lb.	.65	.75
Crude, tins	lb.	.14	.20
Bois de Rose, Brazilian	lb.	1.25	1.40
Cayenne	lb.	2.90	3.00
Cade, cans	lb.	.26	.30
Cajuput, native, tins	lb.	.50	.60
Calamus, tins	lb.	3.25	3.50
Camphor, Sassy, drums	lb.	—	.19
White, drums	lb.	—	.20
Cananga, native, tins	lb.	2.10	2.40
Rectified, tins	lb.	2.50	3.00
Caraway Seed	lb.	1.90	2.20
Cassia, Redistilled, U. S. P.	lb.	1.22	1.25
drums	lb.	—	1.18
Cedar Leaf, tins	lb.	.65	.70
Cedar Wood, light, drums	lb.	.25	.28
Citronella, Java, drums	lb.	.32	.37
Citronella, Ceylon, drums	lb.	.24	.30
Cloves, U. S. P., tins	lb.	.94	.95
Eucalyptus, Austl., U. S. P., cans	lb.	.27	.30
Fennel, U. S. P., tins	lb.	1.15	1.40
Geranium, African, cans	lb.	4.75	7.25
Bourbon, tins	lb.	4.35	6.50
Hemlock, tins	lb.	.70	.75
Lavender, U. S. P., tins	lb.	2.50	6.00
Spike, Spanish, cans	lb.	1.20	1.60
Lemon, Ital., U. S. P.	lb.	1.00	1.20
Lemongrass, native, cans	lb.	.90	1.10
Linaloe, Mex., cases	lb.	1.35	1.50
Nutmeg, U. S. P., tins	lb.	1.30	1.35
Orange, Sweet W. Ind., tins	lb.	1.60	1.85
Italian cop	lb.	1.50	2.25
Distilled	lb.	.65	.70
Origanum, cans, tech	lb.	.25	.50
Patchouli	lb.	2.50	3.50
Pennyroyal, dom.	lb.	1.85	1.90
Imported	lb.	1.35	1.70
Peppermint, nat., cases	lb.	3.30	3.60
Redis., U. S. P., cases	lb.	3.55	3.90
Petit, Grain, S. A. tins	lb.	1.05	1.10
Pine Needle, Siberian	lb.	.85	.90
Rose, Natural	oz.	5.50	18.00
Artificial	oz.	2.00	3.00
Rosemary, U. S. P., tins	lb.	.32	.38
Tech., lb. tins	lb.	.28	.35
Sandalwood, E. Ind., U. S. P.	lb.	5.50	5.75
Sassafras, U. S. P.	lb.	.75	1.00
Artificial	lb.	—	.45
Spearmint, red, U. S. P.	lb.	1.75	2.10
Thyme, red, U. S. P.	lb.	.58	1.02
White, U. S. P.	lb.	.65	1.10
Vetivert, Bourbon	lb.	7.50	8.50
Java	lb.	16.00	20.00
Ylang Ylang, Bourbon	lb.	4.60	7.00

Aromatic Chemicals

Acetophenone, C. P.	lb.	\$1.50	\$2.25
Amyl Cinnamic Aldehyde	lb.	3.50	4.25
Anethol	lb.	1.00	1.10
Benzaldehyde, tech.	lb.	.60	.65
U. S. P.	lb.	1.10	1.30
Benzyl, Acetate	lb.	.60	1.00
Alcohol	lb.	.75	1.15
Citral	lb.	1.90	2.20
Citronellal	lb.	2.25	2.50
Citronellol	lb.	2.55	3.00
Citronellyl Acetate	lb.	4.50	7.00
Coumarin	lb.	3.10	3.30
Cymene, drums	gal.	.90	1.25
Diphenyl oxide	lb.	1.05	1.25
Eucalyptol, U. S. P.	lb.	.62	.65
Eugenol, U. S. P.	lb.	2.00	2.50
Geraniol, Domestic	lb.	1.25	2.00
Imported	lb.	2.00	3.00
Geranyl Acetate	lb.	3.00	3.50
Heliotropin	lb.	1.85	2.10
Hydroxycitronellal	lb.	3.50	9.00
Indol, C. P.	oz.	2.00	2.50
Ionone	lb.	3.60	6.50
Iso-Eugenol	lb.	3.00	4.25
Linalool	lb.	1.65	2.25
Linalyl Acetate	lb.	3.00	4.25
Menthol	lb.	3.50	3.60
Methyl Acetophenone	lb.	2.50	3.00
Anthranilate	lb.	2.15	3.20
Paracresol	lb.	4.50	6.00
Salicylate, U. S. P.	lb.	.40	.45
Musk Ambrette	lb.	5.75	6.00
Ketone	lb.	6.25	6.50
Moskene	lb.	5.00	6.00
Xylene	lb.	2.00	2.50
Phenylacetalddehyde	lb.	4.00	6.50
Phenylacetic Acid, 1 lb., bot.	lb.	3.00	4.00
Phenylethyl Alcohol, 1 lb. bot.	lb.	4.25	4.50
Rhodinol	lb.	5.75	8.00
Safrol	lb.	.50	.53
Terpineol, C. P., 1,000 lb. drs.	lb.	.33	.35
Cans	lb.	.36	.37
Terpinyl Acetate, 25 lb. cans	lb.	.80	.90
Thymol, U. S. P.	lb.	1.40	1.50
Vanillin, U. S. P.	lb.	4.50	5.75
Yara Yara	lb.	1.30	2.00

Pyrethrum Products

Insect powder, bbls.	lb.	.34	.37
Concentrated Extract			
5 to 1	gal.	2.05	2.10
15 to 1	gal.	5.75	6.00
20 to 1	gal.	7.80	7.85
30 to 1	gal.	11.55	11.60

Gums

Arabic, Amb. Sts.	lb.	.09	.09 1/2
White, powdered	lb.	.13	.13 1/2
Karaya, powdered No. 1	lb.	.08	.09
Tragacanth, Aleppo, No. 1	lb.	1.15	1.20
Sorts	lb.	.11	.12

Waxes

Bees, white	lb.	—	.33 1/2
African, bgs.	lb.	.21	.22
Refined, yel.	lb.	.25	.26
Candelilla, bgs.	lb.	.13	.14
Carnauba, No. 1	lb.	.32	.33
No. 2, yel.	lb.	.31	.32
No. 3, chalky.	lb.	.19	.21
Ceresin yellow	lb.	.36	.38
Paraffin, ref. 125-130	lb.	.03%	.04 1/4

PRODUCTS

SOLVAY

TRADE MARK REG., U. S. PAT. OFF.



SODA ASH
CAUSTIC SODA

LIQUID CHLORINE

Contract or Spot Delivery

In tank cars and multiple unit cars

Write for Prices

SODA ASH . CAUSTIC SODA . AMMONIUM CHLORIDE
CHLORINE . MODIFIED SODAS . CALCIUM CHLORIDE
Salt . Caustic Potash Liquor . Ammonium
Bicarbonate . Causticized Ash . Para-Dichloro-
benzene . Sodium Nitrite

SOLVAY SALES CORPORATION

Alkalies and Chemical Products Manufactured by
The Solvay Process Company

61 BROADWAY

NEW YORK

Boston, Syracuse, Chicago, Indianapolis, Cleveland,
Cincinnati, Pittsburgh, Detroit, Philadelphia,
Kansas City, Houston, St. Louis

SPECIALTY SOAPS

LIQUID SOAP BASE

Coco Oil—60%—Natural, Opal, Green

LIQUID SOAPS

Coconut 10% to 45%
Olive Oil 10% to 30%
Colored and Perfumed

SCRUBBING SOAPS

Pine, Sassafras, Plain

LIQUID SHAMPOOS

Coconut Oil .. 30% to 45%
Olive Oil 30%
Castile 30%

POWDERED and GRANULATED SOAPS

Castile, U. S. P.
Coco Castile 50-50
Pure Coconut

SOFT POTASH SOAPS

Light and Dark
U. S. P. 9th and 10th

PHONE CUMBERLAND 6-2800
KRANICH SOAP CO.
54-60 RICHARDS ST. BROOKLYN, N.Y.

SOAP MANUFACTURE IN 1870

(From Page 19)

saponify the grease and resin. After settling, this excess is run off, and the soap is now ready for finishing. This finishing is done by thinning down the soap by heat and adding water to it until the heavy impurities sink to the bottom, while the light ones rise to the top. Upon once more settling the pan, the soap collects in the upper part of it, not now in the grained state of the "paste," but in a clear, uniform, semi-transparent molasses-like fluid. On the top floats a scum a few inches thick, which the workmen call the "fob"; it is yellow and light of structure, with foam-white scales and light impurities about it. Down below, in the bottom of the pan, is the heavy sullen mass of spent lye, and next above it a layer of imperfect soap, containing a certain portion of impurities, and which is called by the workman the "nigger." The word appears to be quite an old one, and to be a true derivative from the Latin *niger*, black, as the stuff itself is dark colored.

As soon as the soap is cool enough, and before it is too cool, it is ladled out of the pan into "frames." These are in the form of a large deep bureau-drawer set up edgeways, and each will hold about twelve hundred pounds of soap. They are open, however, at the top, corresponding with what would be the front of the drawer. They were formerly made by laying square wooden frames one above the other, somewhat as a

log-cabin is built, but are at present usually of iron, which cools much faster.

When cool, the iron frame is removed, and the great lump of soap—also called a frame—is left standing naked all by itself. While still soft and helpless it is slit horizontally into slabs; these are cut perpendicularly into bars, and these bars, whose length represents the thickness of the frame, are the well-known "bar soap." Swiftly the stamp of "Enoch Morgan's Sons" is spatted upon the top of the upper layer of bars; they are laid into a box; spat, spat, spat, goes the stamp again, and the next layer is packed; and in a few minutes the whole twelve hundred pounds are boxed, nailed, labelled, and ready for shipment.

It must not be supposed that this is the only soap made by the firm, by any means. The number of kinds and styles is very considerable, and, from the great number of different practicable combinations of materials and variations of process, can be increased almost without limit. Thus, the house of Enoch Morgan's Sons not only manufactures large quantities of the yellow or bar soap, which we have been following through the process of its manufacture, but regularly supplies other kinds. For instance may be mentioned the "mottled soap," usually termed Castile soap, probably from having been first made in Spain, where the soap business was very ancient. This mottling is accomplished by keeping the soap thick, so that the "nigger" cannot fall down through

(Turn to Page 101)

CAUSTIC SODA

Stauffer
INDUSTRIAL CHEMICALS

Stauffer
CHEMICAL COMPANY

624 CALIFORNIA ST.
SAN FRANCISCO, CALIF.

RIVES-STRONG BLDG.
LOS ANGELES, CALIF.

NIAGARA
FALLS, N.Y.

2710 GRAYBAR BLDG.
NEW YORK, N.Y.

CARBIDE AND CARBON
BLDG., CHICAGO, ILL.

CARBON TETRACHLORIDE

.... a new message to all
users of fatty acids . . .

INDUSOIL

A STANDARDIZED
BLEND OF
FATTY ACIDS

... now available with greatly improved odor and in a lighter color. This new fatty acid is priced to compete with the cheapest. In quality, it now competes with the best.

INDUSOIL is used as the equivalent of Red Oil and other fatty acids in cutting oils and greases, textile soaps and specialties, dry cleaning soaps, soluble oils, metal polishes, de-inking processes, emulsions for asphalt, insecticides, disinfectants, etc.

INDUSOIL is always available in ample supply, a product of a domestic industry always running in large volume,—and free from any excise tax.

Complete information on prices, properties, with sample, will be sent on request. Send the attached coupon today.



INDUSTRIAL CHEMICAL SALES CO., INC.

INDUSTRIAL CHEMICAL SALES CO., INC.
230 Park Ave., New York City

Please send me a oz. sample and chemical analysis of
INDUSOIL.

Name

Address

230 Park Ave.
NEW YORK CITY

205 W. Wacker Dr.
CHICAGO, ILL.

PRODUCTION SECTION

A section of SOAP devoted to the technology of oils, fats, and soaps published prior to Jan. 1, 1932, as a separate magazine under the title, *Oil & Fat Industries*.

Some Notes on COLD SOAP MANUFACTURE

By RALPH H. AUCH

OF THE three widely used methods of making toilet soaps, two are closed to the average small manufacturer. Boiled soap is today made on such a large scale, that the outlay for equipment is heavy. Then too, most of the soap so made is used as such for laundry purposes or subsequently crutched to incorporate air and produce the floating toilet and bath soap, or milled and dried to make either laundry chips or mill base for "French Milled" toilet soaps. Obviously, the quality of the fats and oils, the purity of the lye, and the incorporation or omission of fillers is determined by the use to which the resulting soap is to be put.

Milled toilet soap involves, subsequent to manufacture and chipping, the amalgamation of color and odor into the mass. It requires also milling, either by the wasteful and costly repeated passing through a single mill or passing once through a series of mills in tandem. Then plodding, cutting and pressing involves additional expensive and large capacity equipment. Milled soap then is also closed to most small manufacturers because of outlay for and the capacity of the equipment, even if the soap base were bought on the outside. This leaves so-called cold soap as the only type that the small manufacturer can hope to produce profitably without too sizeable a capital outlay.

The disadvantages of cold-made soap are several. It is necessary to start with the purest ingredients, which makes the cost per pound of finished soap relatively high. This is aggravated by the fact that there is no glycerin recovery. The glycerin to all intents and purposes is lost since it remains in the soap. Low grade or refuse fats or oils cannot be used, as there is no

means in the process for cleaning them up. Coconut oil of good quality is the most widely used oil, although edible tallow, castor oil, palm kernel oil and even rosin find limited application.

Only alkali whether soda or potash, or both, of highest purity should be used. Carbonate contamination is bad since neutral fats are used and carbonates react only with the free fatty acids present ordinarily in low grade oils. Both free fat and free alkali are present in the soap if the saponification is not carried to completion, to remain as such in the finished product and cause trouble.

Most users swear by, while a few swear at cold soaps made of coconut oil, due to the biting action of roughening effect on the skin of certain individuals. The average cold soap bar wastes away more rapidly than a milled soap.

The advantages of this type of soap include a quick, foamy, large bubble lather in both hard and soft, and even salt waters. It lathers more freely than other types in cold water. The "vegetable" soap sales appeal may be made which is a fruitful type among certain classes. Also a nice sales story may be built around the glycerin "famed for generations for its soothing, healing and emollient properties" remaining in the soap as contrasted with "ordinary" soaps in which it has been wholly removed. Very broad claims may be made without resorting to the ridiculous, which incidentally has hurt vegetable oil soaps generally.

There are two types of cold soap, namely neutral and super-fatted. Making the soap a neutral bar is apparently the accepted European practice, and is used to a limited extent in this country. It is made by the

intimate mixing of equivalent quantities of oil and lye, plus the desired quantity of perfume oil and color, at or just above room temperature, framing the mixture and allowing the mass to saponify. The heat required for completion of the reaction is generated by the exothermic character of the reaction.

The finished bar should be on the alkaline side not to exceed 0.1% calculated as sodium hydroxide. This involves analysis of the lye for concentration and determination of the saponification number of the oil so that equivalent amounts are used. It also requires analysis of the finished soap to avoid excess alkalinity. The methods are simple and available in the various texts on soap and on technical analysis.

A neutral frame made from straight soda lye is very hard, in fact too hard for satisfactory workability, particularly on a hand cutting table, such as the small manufacturer employs. The soap may be made more readily workable by replacing the soda lye in part with potash lye. This adds somewhat to the cost and in any white soap the tendency to discolor is increased.

There is a tendency for this neutral bar to be grainy, even sandy in use. A probable explanation is that due to the relatively low temperature prevailing at the start of the saponification, the unsaturated fatty acids saponify first. In the presence of the excess lye, these soaps become granular. As further heat is generated by the reaction the more difficultly saponifiable saturated acids form soap which is deposited upon the previously formed nobules or grains referred to above.

This explanation or, more accurately, this theory accounts in part at least for a neutral cold soap being more opaque than a super-fatted one made from the same ingredients. In the case of white soaps the neutral bar is, however, invariably whiter than the corresponding super-fatted one.

From a perusal of the volatile at 105° C., it may be concluded that 25% moisture is the practical top. Unwrapped, wholly exposed, four-ounce bars carrying 25% moisture will lose an average of 13.8% moisture in 30 days at room temperature. A higher initial moisture content will only mean greater evaporation loss and accentuate discoloration as well as distort the bar itself. The titre indicates the use of straight coconut oil. The sum of free fatty acids and free oil indicates that 5 to 7% super fat is about right. A fresh bar, of course, contains very little free fatty acids, but the free oil gradually splits off free fatty acids and glycerin on aging. This tends to discolor the bar and break down the perfume.

The absence of alcohol insoluble is proof that no filler is used in their manufacture even in the cheapest brands, while four ounces appears to be good practice for bar size.

A Working Formula

A workable base formula in light of the above follows:

Cochin Coconut Oil.....	650 pounds
Soda Lye—38° Be.....	334 pounds
Perfume	5 pounds
Color (if desired).....	q.s.
Water to Make.....	1,000 pounds

Various attempts have been made to correct this condition. In the case of a soap made with mixed lyes, the ratio of potash to soda lye has been varied from 1:10 to 1:2 without wholly correcting the graininess. On inspection after six months, the bars with the different ascending ratios were found to vary from white and very hard to a yellow cast and relatively soft.

Electrolytic soda lye carrying an average sodium chloride content of 1.58% was replaced with Solvay process soda lye, having an average of only 0.22% salt. It was felt that some salting out action might be taking place. The replacement did not correct the condition, however. The starting temperature range, that is of the oil and of the lye, appears to have little, if any, effect on the tendency to graininess.

Replacing the coconut oil with palm kernel oil eliminates the grainy tendency, but its use is confined to colored soaps. The freshly made soap comes off white, but on aging, a yellow cast becomes pronounced and the characteristic palm kernel odor develops, so that when 18 months old it may be considered no longer saleable.

So that straight soda lye might be used in making a neutral soap, mineral oil has been added to the batch to impart workability. A high enough percentage of mineral oil to be workable, namely 6%, imparts a "mealy," "crumbly" feel to the bar. The lathering quality is not impaired, however, and the lather has a desirable creaminess. Using some mineral oil and some potash lye produces a neutral soap that has entirely satisfactory characteristics. The formula follows:

Cochin Coconut Oil.....	620 pounds
Soda Lye—38° Be.....	287 pounds
Potash Lye—38° Be.....	70 pounds
Light White Mineral Oil...	20 pounds
Perfume Oil	5 pounds
Color (if desired).....	q.s.
Water to make.....	1,000 pounds

The above figures are approximate, for to insure neutral soap the lyes must be adjusted to compensate for the variable amount of carbonates present which affects the

Partial Analyses of Better Known Cold Soaps

	I	II	III	IV	V	VI	VII
Volatile @ 105° C.....	24.45%	12.48%	23.08%	12.74%	18.60%	23.43%	14.95%
Titre (Centigrade)	23.4°	23.6°	23.2°	23.1°	22.8°	23.4°	22.5°
Free Fatty Acids.....	2.74%	2.27%	2.26%	5.70%	2.40%	1.83%	2.80%
Free Oil	4.70%	3.49%	3.98%	2.81%	5.91%	5.32%	1.72%
Alcohol Insoluble	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Net Wt. of Bar.....	4 oz.	5 oz.	5½ oz.	3 oz.	2¾ oz.	4 oz.	5 oz.

Baume and for the variation in saponification number of the oil.

Super-Fatted Cold Soaps

SUPER-FATTED cold soap may be made with a certain amount of abandon. Since there is a deficiency of soda lye, or conversely, an excess of oil in the finished bar, it matters little, if at all, whether the excess oil is more or less within reasonable limits. That super-fatting cold soaps is the accepted American practice is evidenced by the analysis of seven of the better known cold soaps marketed as "Vegetable", "Coco-Castile", "Hardwater", and the like.

The colors used must be alkali fast since they are added to the batch in the presence of a high concentration of lye. White and pastel shades are the vogue, so that darker colors should not be employed. Any dye-stuff used should be dissolved in water and filtered to avoid color specks. A one per cent solution or 1 or 2 ounces dry color per gallon of water are convenient concentrations. For a bright pink, Rhodamine B 1% used in amount of 5 fluid ounces per 1,000-lbs. soap is quite satisfactory. For a suitable blue 6 fluid ounces of Patent Blue A 1% solution is sufficient for 1,000-lbs. soap. A pale yellow is produced by 15 fluid ounces of a 1% solution of Fluorescin per 1,000-lbs. soap while doubling the above figure makes a bright yellow. An attractive green is made by adding to 1,000-lbs. soap 8 fluid ounces of a 1% solution Metanil Yellow and 5 fluid ounces of a 1% solution of Patent Blue A. More or less of these colors may be employed to obtain the exact shade desired.

To render the bar more opaque and retard the tendency to discoloration, titanium dioxide may be added, since it is quite inert. Three ounces or less per hundred-weight of soap is sufficient. To insure uniform distribution in the soap mass, it should be rubbed smooth in a mortar with a few ounces of the coconut oil or light mineral oil.

Everyone has his own ideas as to odor, but one's choice must be restricted to those oils and aromatics that will stand up in the high initial concentration of lye. The following list of materials have been used with entire satisfaction and almost without exception will not discolor even a white bar. All also fall in the lower price brackets. Many will be observed to have a place in rose odors and justly so, for rose is popular in cold soaps.

Oil Cedarwood	Benzophenone
Oil Bois de Rose	Diphenyl Methane
Oil Bois de Rose, Terpeneless	Terpineol
Oil Geranium, East Indian	Geraniol
Balsam Copaiba	Ionone for Soap
Bromstyrol	Citronellol
Labdanum Concrete	Methyl Phenyl Acetate
Musk Ambrette	Diphenyl Oxide
Benzyl Acetate	Geranyl Acetate
Phenyl Ethyl Alcohol	

A typical satisfactory compound may be made as follows:

Bois de Rose, Terpeneless...	5 pounds
Citronellol	8 pounds
Diphenyl Oxide	8 pounds
Geraniol	22 pounds
Methyl Phenyl Acetate	2 pounds
Oil Cedarwood	4 pounds
Benzyl Acetate	2 pounds
Phenyl Ethyl Alcohol	8 pounds
Geranyl Acetate	5 pounds
Di Phenyl Methane	1 pound
Oil Geranium, East Indian	5 pounds
Musk Ambrette	4 pounds
Balsam Copaiba	10 pounds
Terpineol	12 pounds
Benzo Phenone	4 pounds
To Make	100 pounds

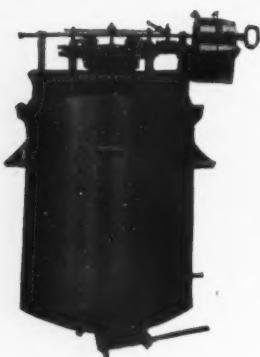
There have been a number of ingredients advanced from time to time for use in cold soaps. Those who advanced them in many instances were so enthusiastic that they secured patent protection. They will not be discussed at length. For example, however, patents have been granted recently in some countries on the incorporation of a fraction of 1% of powdered metallic aluminum. A little of the alkali reacts with the aluminum and liberates hydrogen gas. This makes the mass porous so that the cut bar will float. On pressing in a power press it has been found that the soap is compressed to the point where it again sinks and the advantage, if any, is largely lost.

The large manufacturer, of course, uses jacketed agitator kettles, large frames, power slabbers, automatic cutting tables and power presses. The small manufacturer, however, can successfully use the simplest equipment. The weighed oil is warmed to 100 degrees Fahrenheit or less, than may be run directly into the frame. The weighed lye and water is then run in, in a slow stream, followed by the perfume and color, if any. The frame is agitated by hand with a wooden paddle until saponification has progressed to the point where the mass is homogeneous.

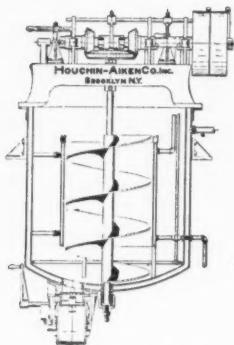
The heat generated by spontaneous saponification is sufficient for the reaction to go to completion. The frame and its contents should stand for at least 36 to 48 hours undisturbed. Incidentally, instead of caulking each frame with soap scrap to avoid leaking, parchment paper bags of exact size for the frame may be used. These bags are commercially available, and in addition to effecting a saving in labor, they prevent any discoloration and contamination caused by the soap coming in direct contact with the interior walls of the frame.

After cooling and solidifying, the soap is ready to have the frames stripped off. The frame of soap is then slabbed with a hand operated slabber, if need be. It then is transferred to the cutting table which may be hand operated, cut into bars and racked. The size and shape of bar should be such that the frame cuts to a minimum of waste. Cold soap scrap has little value, especially to the small manufacturer who cannot rework

NEW and USED **HOUCHIN SOAP MACHINERY**



Perfection Crutcher
Sliding Gate Valve



Perfection Crutcher Cross
Section View Plunger
Type Valve



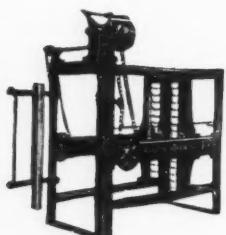
Horizontal Crutcher



Empire State
Press



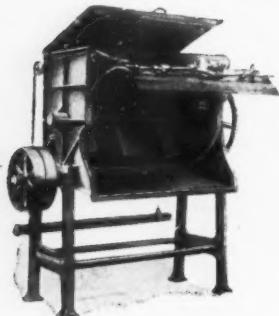
Standard
Soap Frame



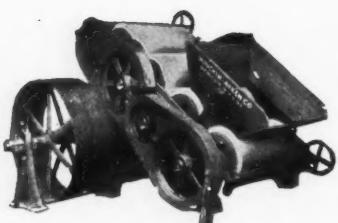
Automatic Power
Slabber



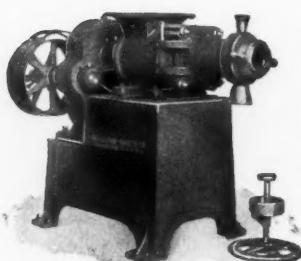
Automatic Power Cutting
Table



Ideal Amalgamator



4-Roll Mill
Mills built with 3 to 12 Chilled
Iron or Granite Rolls



Spur Gear 10" Screw Plodder
Plodders furnished with 2½"
to 12" screws

Write Us For Information Regarding MILL-LESS Method for Making Toilet Soap

HOUCHEIN MACHINERY CO., Inc.

FORMERLY HOUCHEIN-AIKEN CO., INC.

HAWTHORNE, NEW JERSEY

it. In one case, a minor change in two dimensions of the bar reduced the scrap from about 26% to 28% to about 12%.

After a short time the blank bars may be pressed and wrapped. If a foot press is employed, the cut size should approximate very closely the finished bar. Cold soap is relatively hard and foot pressing is hard work at best, so the bar should be imprinted with a minimum of pressure.

In closing, several cold soaps have been observed that discolor the inks on their wrappers. To avoid this condition, samples of the wrappers should be applied to the finished bars wrong side out and observed for several weeks to make sure that no fading or discoloration takes place.

HARDNESS OF SOLID SOAPS

The rate of cooling soaps has a marked influence on certain properties such as color and hardness. Soaps made from certain fat charges show appreciable differences in hardness when cooled slowly and quickly, others show little or no difference. The contraction of two soaps during slow and rapid cooling was determined. One soap contained a higher proportion of hard fats than the other, but their titres were nearly equal, 30° C. and 29° C. The initial solidification point of the soap containing more hard fats was distinctly higher than that of the other. The initial solidification points of both soaps were considerably higher than the titres. This points to the relative amounts of solid and liquid fatty acids rather than to the titres as being the cause of a high or low initial solidification temperature. For practical purposes, the figures obtained show that the rate of cooling within the limits examined has no marked effect on the amount of contraction.

A machine designed to estimate the hardness of soap measures the resistance offered by a soap to a cutting wire. This is of aid to the manufacturer in connection with cutting, stamping, factory control, etc. The effect of electrolytes on the hardness of soap was determined quantitatively. For sodium chloride, sodium carbonate and sodium sulfate, increasing concentration of electrolyte results in the hardness falling to a minimum and then increasing. With certain salts the hardness increases to a maximum and then decreases. J. L. Brown and R. Thomas. *Industrial Chemist* 10, 381 (1934).

Glycerin can be determined in liquid soaps by a modification of the method of Davidsohn: Neutralize 100 grams of liquid soap with 2 N hydrochloric acid. Evaporate the filtrate and treat the residue with a 1:1 mixture of alcohol and ether. Distil off the solvents, precipitate the remainder of the fatty acids in aqueous solution, filter, evaporate the filtrate, and extract the glycerin repeatedly with an alcohol-ether mixture. It is possible to determine the glycerol accurately in the presence of sugar and alcohol. G. Knigge. Deut. *Parfum-Ztg.* 19, 197-8.

FATTY ACID IN COCONUT OIL SOAPS

The fatty acid content of a sample of coconut oil was determined carefully and found to be 94.21 per cent. The coconut oil was then used for soap manufacture and the fatty acid content determined in the soap, in terms of the amount of coconut oil used. Values found by the wax-cake method were 101.81, 97.01, 95.10, 99.70, 94.91, 96.31, and 95.41 per cent. This method therefore leads to high values for coconut oil soap.

The ether extraction method, after drying for varying periods of time at 55° C., gave values varying with the time of drying, as follows:

Time	Per Cent
½ hour	100.06
1 hour	97.35
1½ hours	95.05
2 hours	93.74
3 hours	90.37

Other determinations by this method gave comparable results, and showed that less than half the correct value may be obtained by prolonged drying.

Using a Lüring buret the following values were obtained:

Sample Corresponding to	Per Cent Fatty Acid
10 g. oil	94.1
5 g. oil	95.8
10 g. oil	94.9
10 g. oil	94.9
10 g. oil	94.5
10 g. oil	94.9

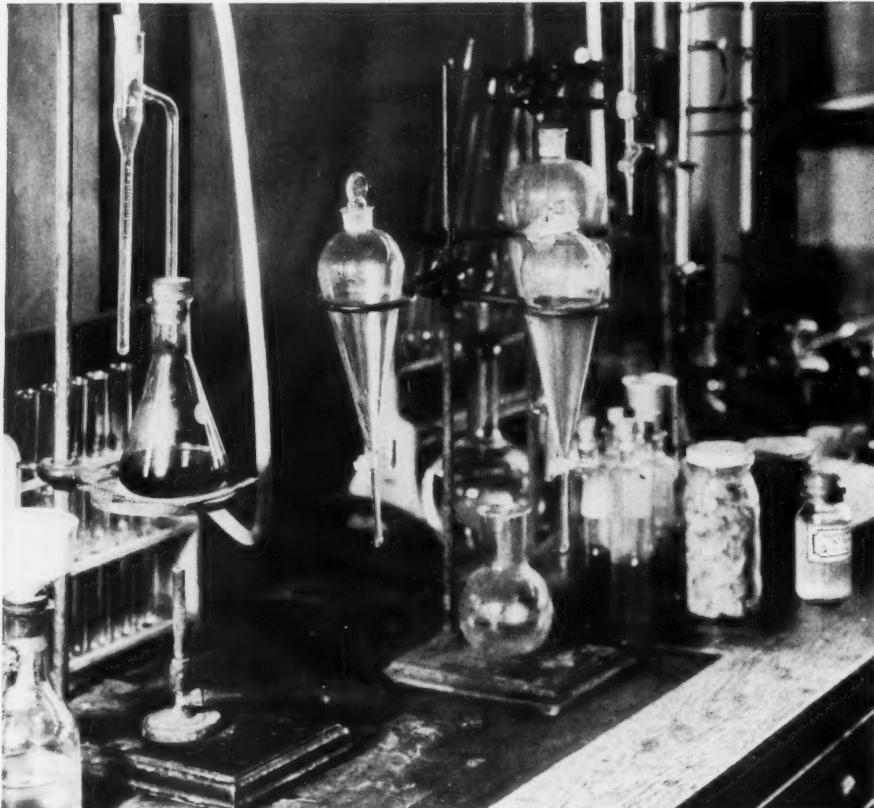
The data indicate that the volumetric method, using a sufficient amount of sample under suitable conditions, leads to more consistent and more accurate results than the other two methods for the determination of the fatty acid content of coconut oil soap. W. Lüring. *Seifensieder-Ztg.* 61, 729-31 (1934).

To make a gravimetric microdetermination of unsaponifiable matter, dissolve 2-3 mg. of fat or oil, or more if less than 2 per cent of unsaponifiable matter is present, in toluene. Transfer the solution to a small saponification flask. Evaporate off the solvent, and determine the exact weight of the sample on a microbalance. Place this flask in another vessel and add to the weighed fat 0.4-0.6 cc. of a mixture of 2 parts of N alcoholic sodium hydroxide solution and 1 part toluene. Heat in a Pregl drying block to 120-130° C. under a reflux condenser. After an hour, remove the condenser, evaporate off alcohol and toluene almost completely, and add 1 cc. of a cold saturated barium hydroxide solution. Evaporate nearly to dryness without boiling, and dry in a vacuum at 30-50° C. Extract the residue with low-boiling petroleum ether. G. Gorbach and A. Sablatnog. *Mikrochemie* 14, 256-62 (1934).

Wetting, cleansing and bleaching agents are made by causing sulfonating or phosphonating agents, boric acid and hydrogen peroxide, to act on fatty substances such as oils, fats, glycerides, waxes, alcohols of high molecular weight, mineral oils, or like substances. H. Th. Boehme A.-G. French Patent No. 763,691.



P. Q. SILICATES PRESCRIBED



NO MATTER how skilled the cook, she needs good wholesome ingredients to produce a savory dish. Just so, a good soap gets its start in life with the right materials.

Those supplies tested and proved to be uniform in performance over long periods are your first preference. The consistently uniform alkalinity of P. Q. Silicates

of Soda, for instance, insures a smooth mixture in the soap crutchers.

When an excess of alkali might ruin a batch of soap, quality of silicate is a vital factor. Prescribe P. Q. for dependable composition.

P. Q. Silicates of Soda have been serving soap makers for more than three-fourths of a century.



PHILADELPHIA QUARTZ COMPANY

General Offices and Laboratory: 125 S. Third Street, Philadelphia, Penna.

Chicago Sales Office: 205 W. Wacker Drive. Stocks in 65 cities.

Sold in Canada by NATIONAL SILICATES LTD., Toronto, Ontario

WORKS: Chester, Pa., Kansas City, Kans., Baltimore, Md., Rahway, N. J., Anderson, Ind., St. Louis, Mo., Buffalo, N. Y., Utica, Ill.

ON PRODUCTS AND PROCESSES

Cold-process soaps containing grease solvents are made by adding the solvent when the mixture of fat or fatty oil and alkali becomes thick enough so that a mark made on it persists. When a mixture of solvents is used, the less volatile may be added to the oil before the alkali, especially when rosin or oils or high titer are used. The rosin-solvent or oil-solvent mixture may then be poured into the lye. Hugh E. Wethered and Frank H. Sedgwick. British Patent No. 410,528.

Bleaching or adsorptive earths are efficient in removing the greenish color from such fats as tallow, palm oil and peanut oil. The bleached fat is separated from the earth by means of a filter press, heated with indirect steam to avoid undue loss of fat or oil with the bleaching material. Paste soaps are bleached better by chlorine bleaches than by adsorptive earths. E. Gelbrich. *Seifensieder-Ztg.* **61**, 710 (1934).

A metal detergent particularly suitable for cleaning tinned metal surfaces and inhibiting corrosion or spangling of the tin consists of a solution of trisodium phosphate, soda ash and sodium dichromate. The Canadian Permag. Products, Ltd. Canadian Patent No. 345,172.

Crystalline sodium metasilicate hydrate is prepared from a hot concentrated solution of sodium metasilicate containing at least 20 grams of caustic soda per 100 cc. The solution is cooled to a temperature of 25 to 55° C. and the crystallization temperature correlated to the free caustic in the solution, so that for each 5° C. drop in the crystallization temperature below 55° C., there is at least an increase of 2 grams of caustic soda per 100 cc. of solution above 25 grams. The Canadian Industries, Ltd. Canadian Patent No. 345,347.

Spanish olive oil was hydrogenated at a pressure of 80-120 atmospheres of hydrogen and 160° C. The high pressure was used in order to avoid secondary reactions and destruction of the molecule. The solid product obtained contained 71.55 per cent of the original fatty acid as a solid fatty acid. Nickel was used as a catalyst, precipitated by ammonium carbonate and reduced by hydrogen at 450° C. Adsorption of hydrogen by olive oil begins at 80 atmospheres and 80° C. J. M. Pertierra *Anales. soc. espan. fis. quim.* **32**, 738-41. (1934).

Wax-like substances are made by heating mixtures of higher aliphatic carboxylic acids or their anhydrides or esters to 100-450° C. with a decarboxylating catalyst. The products are hydrogenated. Starting materials may

be waxes such as beeswax or spermaceti, acids obtained from such waxes, esters or wax acids, conversion products of waxes such as oxidation products of montane wax, oxidation products of higher paraffins, and oils, fats, or their fatty acids, such as olive, coconut, castor and linseed oils, beef tallow and whale oil. The products may be used in making polishing compositions, for impregnating paper and textile materials, for hardening readily fusible waxes, and as lubricants for machinery. I. G. Farbenind. A.-G. British Patent No. 410,087.

Trisodium phosphate hexahydrate is obtained by salting out a trisodium phosphate solution within the temperature range of 71 to 103° C. The salting out agent is a sodium compound compatible with trisodium phosphate and is used in an amount corresponding to at least 1/2 molecular amount of salting out agent to each molecular amount of trisodium phosphate present. The Canadian Industries, Ltd. Canadian Patent No. 345,270.

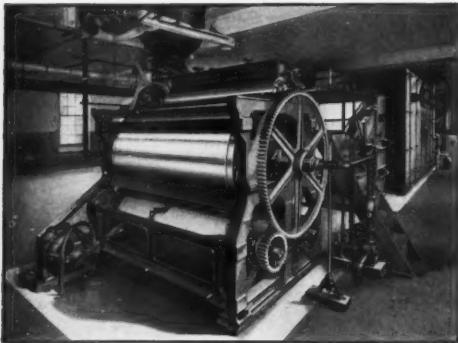
Cleansing and wetting agents for use in the treatment of textiles are obtained by condensing a hydroxybiphenyl with an alcohol, and treating the product with sulfuric acid. The Rubber Service Laboratories Co., British Patent No. 409,773.

Mono- and diglycerides are formed by treating fat with glycerol in the presence of soap as a catalyst. Mono-esters of glycol can be similarly produced. Excellent results are obtained at temperatures of 170 to 205° C. August Edeler and Albert S. Richardson, to the Procter and Gamble Company, Canadian Patent No. 340,804.

Two commercial samples of soy bean lecithin were shown to be weak antioxidants. Their antioxvgenic indices were 1.7 and 1.8. This index is the induction period of the fat with added antioxidant, divided by the induction period of the fat alone. After purification of the soy bean lecithins by precipitation with acetone, indices obtained by means of the Kreis test were increased. E. W. Kochenderfer and H. Gregg Smith. *Proc. Iowa Acad. Sci.* **39**, 169-70.

Agents for use in the textile industry are made by condensing terpenic alcohols or unsaturated aliphatic alcohols containing at least 6 C atoms, with aromatic hydrocarbons in the presence of condensing agents such as aluminum chloride, and sulfonating the product obtained. Sulfonation and condensation may be carried out together. Soc. pour l'ind. chim. a Bale. French Patent No. 763,990.

PRODUCING THE PERFECT CHIP FOR ALL SOAP MAKING NEEDS



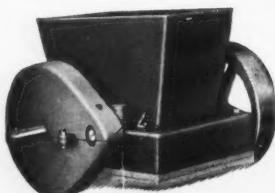
• New Type Proctor Chip Soap System producing extremely thin chips of textile soap in new plant of Original Bradford Soap Co., River Point, R. I.

• The New Proctor Chip Soap System produces the thinnest of chips . . . chips perfectly formed in long ribbons, evenly thin from edge to edge, uniformly dried free from hard overdried particles or underdried spots. These chips make cleaner, whiter, quicker-dissolving laundry flakes. They make smooth-surfaced, clear-colored toilet cakes. They give quicker, better milling and plodding. They give quicker, easier grinding into powdered soaps . . . with less loss in dust. New high speed chilling roll . . . spray-cooled, pump-drained, precision-ground, smooth-surfaced. New drying machine . . . with revolutionary improvements in principal details of design . . . more efficient, more economical, cleaner in operation. Write for your copy of our new descriptive Bulletin No. 72.

PROCTOR & SCHWARTZ, INC.
• SEVENTH ST. & TABOR ROAD PHILADELPHIA •

BLANCHARD

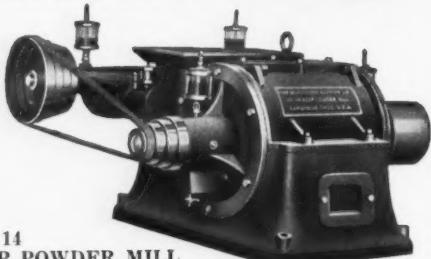
SOAP POWDER MACHINERY



NO. 9 CRUSHER



NO. 10-A SOAP POWDER MILL



NO. 14 SOAP POWDER MILL

WRITE FOR OUR DESCRIPTIVE CIRCULARS

THE BLANCHARD MACHINE COMPANY
14 STATE ST. CAMBRIDGE, MASS., U. S. A.

SOAP WANTED

By a free summer camp for poor children. Do you want to help keep this camp open next summer? Help the good work by giving a dozen or two bars of soap,—that is all. Several cases are needed altogether. Others are giving everything from food to blankets.

Will you send a dozen bars of your soap as a Christmas gift for these poor kids? Just tear out this advertisement and pass it along to the right person in your organization. We will appreciate your help and so will the kids.

Eplea Lodge
Fresh Air Commission
William O. Buettner
2131 New York Ave., Brooklyn, N. Y.

SILICATE SOAPS

Soaps built with silicate have usually been made with a fat mixture containing 40 to 45 per cent of coconut oil. A new suggested formula for the fat mixture in such a soap is:

A. 25% tallow
25% hardened soy bean, linseed or peanut oil,
40/42°

50% bone fat, or 25 bone fat and 25 horse fat¹.

¹ In Germany, chemists are making every effort to use domestic sources of supply. Horse fat seems to be among them.

The fat is used with 30 per cent of sodium silicate, 38° Be., and 300 per cent of kaolin, kieselgubr or other suitable earth.

Other suggested fat mixtures are:

B. 20% tallow, second pressing
25% hardened oil, as above
10% castor oil, second pressing
25% bone fat
20% horse fat.
C. 20% tallow, second pressing
30% hardened oil, as above
10% castor oil
20% horse fat
20% bone fat.

Seifensieder-Ztg. **61**, 711-2 (1934).

CONTINUOUS OIL EXTRACTION

Most of the oil extraction equipment employs the batch process. A continuous process has recently been announced for extracting oil from soy beans, cotton seed, tung nuts, linseed, castor beans, copra, bone meal, meat scraps, and a wide variety of oil-bearing materials. In the new process, all of the oil-bearing material is mixed thoroughly with the heated solvent for the required period of time. The equipment permits fresh solvent to be passed over the material of lowest oil-bearing value first, thus reducing its oil content still further at a time when the solvent has greatest absorption value. The greatest amount of oil is extracted with the least amount of solvent. The oil is separated and pumped to storage tanks, and the solvent vapors condensed and stored for re-use. A high percentage of oil recovery is claimed, with the economic advantages of continuous operation. Harry H. Bighouse. *Chem. & Met. Eng.* **41**, 482-3 (1934).

Ripe Brazilian iguape nut contains about 61 per cent of oil which is suitable for soap making. On the first pressing, 85 per cent of this can be extracted, 7 to 9 per cent on the second pressing and the balance by means of solvents only. The oil has the following constants: d. 0.928, N40 1.470, acid number 1.3-4.8, saponification number 188.5-204.2, Hubl iodine number 139.7-166.7, unsaponifiable 0.4 per cent. The solidification point of the fatty acids is 12.7° C. On heating, the oil gets at 135° C. and polymerizes at 230°. Exposed to sunlight it thickens in 2-3 hours. The press cake is suitable for fuel. Neither the oil nor the press cake can be used as food because of the presence of an alkaloid of unknown constitution. F. W. Freise. *Tropenpflanzer* **37**, No. 2, 59-64 (1934).

HYPPOCHLOROUS ACID VALUE OF OILS

A new constant for fixed oils is suggested. The substitution which occurs in the ordinary methods of determining the degree of unsaturation of an oil is to a large extent eliminated by using hypochlorous acid as the reagent. The method consists of saponifying the oil, neutralizing the solution, and determining the amount of hypochlorous acid absorbed by the sodium salts of the fatty acids.

Prepare sodium hypochlorite solution from bleaching powder with a slight excess of sodium carbonate. Adjust the concentration of the solution so that 5 cc. equals 20 to 25 cc. of the 0.1 N sodium thiosulfate solution. Add an excess of potassium iodide solution to 5 cc. of sodium hypochlorite solution and acidify with dilute sulfuric acid. Titrate the liberated iodine with thiosulfate solution and repeat the test with standard sulfuric acid. The volume of the latter required just to liberate the full amount of iodine is thus determined.

Saponify from 0.12 to 0.125 gram of oil in the usual way with 25 cc. of approximately 0.2 N alcoholic potassium hydroxide solution. Exactly neutralize excess alkali with standard hydrochloric acid, using bromothymol blue as indicator. Evaporate to a pasty mass. Dissolve the soap in water and transfer to a 753 cc. flask. Dilute to 600 cc. Add 5 to 8 cc. of sodium hypochlorite solution and just enough standard sulfuric acid to neutralize the sodium carbonate solution and liberate hypochlorous acid. Close the flask quickly with a rubber stopper fitted with a dropping funnel containing potassium iodide solution. Shake and keep in a dark cool place for 15 minutes. Add the potassium iodide solution, rinse the funnel and shake. Acidify with excess dilute sulfuric acid and titrate the liberated iodine with standard thiosulfate solution. The difference between this and the blank test gives the amount of hypochlorous acid absorbed. Each cc. of 0.1 N sodium thiosulfate solution = 0.002625 gram of hypochlorous acid. Absorption is complete in 15 minutes. The following values were found:

Oil or Fat	<i>Hypochlorous Acid Absorbed in Per Cent</i>
Peanut	18.0
Buffalo ghee	7.8
Coconut	1.9
Olive	17.6
Mustard	22.3
Sesame	22.1
Linseed	35.1
Fish (clupea ilisha)	17.8

M. Gosevarni and K. L. Basu. *Analyst* **59**, 533-4 (1934).

The difficulty of detecting the presence of tea seed oil in olive oil has long been recognized. Not only are the fatty acids present the same in each case, but they are closely similar in amount. The determination of the iodine value of the unsaponifiable matter still remains the only method available, and even this is not beyond criticism. *Perfumery and Essential Oil Rec.* **25**, No. 2, 64 (1934).

No Chemical Plant Is Complete Without a Compact Technical Library

And No Such Library Is Complete Without These Well-Known **TECHNICAL BOOKS**

Perfumes, Cosmetics and Soaps, by Poucher. New and revised edition of this standard reference. Volume I, a dictionary of raw materials, 394 pages, \$6.50. Volume II, dealing with the manufacture of soaps, perfumes and toilet preparations, 406 pages, \$9.00.

Modern Cosmetics, by Chilson. 400 pages of practical, usable information for the manufacturer of cosmetics. Formulas and manufacturing instructions for everything in the cosmetic line, \$6.00.

The American Soap Maker's Guide, by Meerbott and Stanislaus. The most recent American publication on soap manufacturing. 750 pages. \$7.50.

Henley's Twentieth Century Book of Recipes, Formulas and Processes. A handy reference book listing 10,000 miscellaneous formulas, including special sections for soaps, polishes, insecticides, etc. 800 pages. \$4.00.

The Industrial Chemistry of Fats and Waxes, by Hilditch. A study of the fats and waxes in relation to their use in industry. 450 pages. \$6.00.

Hydrogenation of Organic Substances, by Ellis. Latest revised edition of this well-known book, pre-eminent in the field of hydrogenation. 990 pages. \$15.00.

Modern Soap and Detergent Industry, by Martin. Second Edition. An outstanding contribution to the literature on soap manufacture. Thoroughly up to date work covering processes, apparatus and formulas. In two volumes—cloth binding, 6½ x 10½. Price \$14.00 for each volume.

Modern Soap Perfumes, by Sedgwick. A practical handbook on the science of soap perfumery. \$1.00.

Pyrethrum Flowers, by Gnadinger. A complete compilation of all known facts on pyrethrum; its history, sources, evaluation, chemistry and uses. The problems involved in the manufacture of pyrethrum products are given thorough and lucid exposition. 270 pages. 3.50.

Soaps and Proteins, Their Colloid Chemistry in Theory and Practice, by Fischer. 272 pages. \$4.00.

Soaps, by Hurst. A practical manual of soap manufacture. 440 pages. \$8.50.

A Handbook of Soap Manufacture, by Simmons and Appleton. 167 pages. \$4.00.

Soap Blue Book, A Buyer's Guide, Catalog and Business and Technical Reference Book. 195 pages. \$1.50.

Vegetable Fats and Oils, by George S. Jamieson. 444 pages. An American Chemical Society Monograph. Covering classification, occurrence, properties, analytical methods, etc., of vegetable oils, fatty acid and other derivatives; also production and refining methods. \$6.50.

Chemistry of Laundry Materials, by D. N. Jackson. A new book for the laundry operator, containing valuable information on the chemistry of laundry materials. Discusses alkalies, soaps, bleaches, starches, also the newer detergents, synthetic soaps, etc. 230 pages. \$2.50.

Owing to the large number of books supplied it is impossible to open accounts on individual book orders or to supply books on approval. Please send check with order.

MacNAIR-DORLAND CO.

136 LIBERTY STREET

NEW YORK CITY

NON-CORROSION EQUIPMENT FOR WHITE SOAPS

Discoloration of soaps and the occurrence of rust particles resulting from the use of steel equipment is a serious factor in the manufacture of high quality white soaps, such as white floating soaps, flake soaps and toilet soaps. In recent years some manufacturers have installed kettles with the top sections lined with Monel metal sheets, or kettles made completely of nickel-clad steel.

Miscellaneous equipment of non-corrosive metals is illustrated by tower construction for spraying soap powder, made of stainless steel, and soap crutchers of Monel metal. Fat-splitting autoclaves were formerly made of copper, although steel was used in some cases when the fatty acids were to be distilled. Monel metal has been used but more recent construction is of nickel-clad and stainless-clad steel. The use of these new materials permits the building of larger autoclaves and the use of higher pressures than was possible with copper autoclaves. Recent installations of fatty acid distilling equipment have made extensive use of stainless steel, stainless-clad steel, nickel-clad steel, nickel and Monel metal for stills, condensers, separators and pipe lines. Oscar H. Wurster, *Chem. and Met. Engineering* 41, 530 (1934).

ALKALI DETERMINATION IN PASTE SOAPS

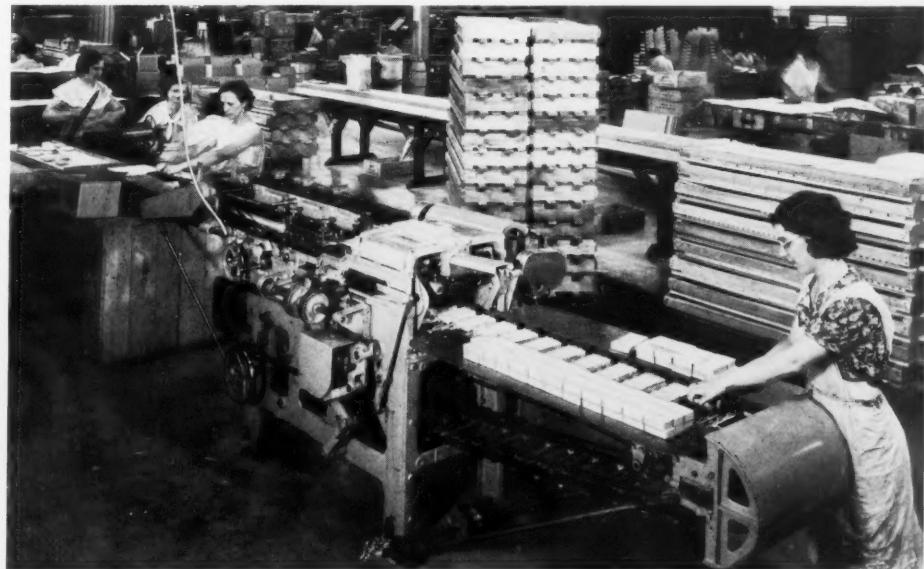
Davidson's method for determining free alkali in soaps having a high water content, such as liquid or paste soaps, is modified as follows: Dissolve 5 grams of sample in about 75 cc. of neutralized absolute alcohol by heating in a flask under an air condenser. Attached to the air condenser is a soda-lime tube. After solution is complete, cool under running water with the condenser still attached. Add to the solution 5 grams of powdered pure anhydrous sodium sulfate (Glauber's salt) and close the flask. Let stand for a half hour with frequent shaking. Make a portion of absolute alcohol just alkaline and use this for neutralizing a filter. Filter

the soap solution, keeping the filter covered with a watch-glass. Wash the flask and contents with absolute alcohol to remove all soap. Titrate the filtrate with 0.1 N alcoholic hydrochloric acid. This is prepared by mixing 8.8 cc. of pure hydrochloric acid with 1 liter of absolute alcohol. Standardize as usual. G. Knigge, *Seifensieder-Ztg.* 61, 772-3 (1934).

LOWER FATTY ACIDS CONTENT OF SOAPS

In Germany it is recommended that fats be conserved by reducing curd soaps from a fatty acid content of 60 to 62 per cent, to a fatty acid content of 50 to 52 per cent. It is suggested that addition of silicate replace a part of the former fatty acid content. The resulting product is claimed to have as good a cleansing action as previous soaps, although it may not be as fine in appearance. The modification is made by adding 20 parts of silicate solution to 100 parts of soap base. The silicate solution contains 16 parts of commercial sodium silicate, 1 part of 38° Be caustic soda solution and 3 parts of 20° Be caustic potash solution. No special mechanical difficulties should be encountered in making the change as long as oils such as palm kernel and coconut oil are still available. R. Krings, *Seifensieder-Ztg.* 61, 749-51 (1934).

The various methods of determining and defining the acetyl number of fats and oils leads to confusion. It is suggested that one definition and one method of determination be adopted. The proposed definition is that of Andre, that the acetyl number is the number of mg. of acetic acid which can be fixed by 1 gram of fat. Delaby and Breugnot's method is suitable. This is to mix 1.3 grams of fat and 10 cc. of a mixture of 1 part acetone and 2 parts pyridine and heat for 30 minutes to 1 hour. Cool and titrate with 0.5 N sodium hydroxide solution. Run a blank in the same way. M. Th. Francois, *Ann. fals.* 27, 334-9 (1934).



A new wrapping machine installation at the plant of Allen B. Wrisleay Co., Chicago, designed to be adjustable for one, two and three-bar combination soap packages. Shown working on the three-bar package. Equipment by Battle Creek Wrapping Machine Company.

In the Sweet

BUY AND BUY

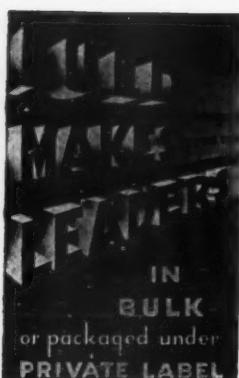
Sell them once - - and from then on your customer will buy and BUY!

FULD'S DRAIN PIPE CLEANER and **FULD'S BOWL CLEANER** - - - two "key" products which are used constantly. They're built for "show-off" performance and to build your reputation.

That's why they

SELL AND SELL!

FULD BROS. INC.
2310 FREDERICK AVE.
BALTIMORE, MARYLAND



PRODUCTS
FULD MAKES
for the
LEADERS

LIQUID CLEANERS

Pine Scrub Soap
Sassafras Scrub Soap
Floor Bleach
Rug Shampoo

OIL and SOFT SOAP

All Percentage Oil Soaps
Jelly Soaps

LIQUID and BASE SOAPS

Liquid Hand Soaps
(All percentages 10 to 40%)
Shampoos
Coconut Oil Base Soaps

DISINFECTANTS

Pine Oil
Coal Tar
Cresol Compounds
Chlorine

INSECTICIDES

Roach Powders
Fly Sprays
Cattle Sprays
Pyrethrum Sprays
Moth Spray
Sprays for Special Purpose

FLOOR WAXES and SEALS

Self-Polishing Wax
Liquid Wax
Wood Seal
Gym Seal
Terrazzo Seal
Wax-Varnish
Paste Wax
Dance Floor Wax

POLISHES

Count 1234567
Metal Polishes
(Liquid, Paste & Powdered)
Auto Polish
Furniture Cream
Furniture Polish
Floor Oil

PLUMBING SPECIALTIES

Drain Pipe Cleaners
Liquid & Powdered Bowl Cleaners
Tile & Enamel Cleaners
Boiler Compounds

CLEANING COMPOUNDS

Washing Compounds
Window Cleaner
Scouring Compounds
Fabric Cleaners
Weed Killers
Waterless Cleaner
Beer Coil Cleaner
Paint & Varnish Remover

LIQUID DEODORANTS

Chlorofig
Forma Chloro Sprays
Theatre Sprays
Pine Deodorant
Drip Machine Fluid

DEODORANT BLOCKS and CRYSTALS

Urinal Blocks
Deodorant Blocks
2 to 40 oz. sizes
Deodorant Crystals

CONTAINERS

Urinal Strainers
Wall Containers
Soap Dispensers

SANITARY PRODUCTS

A Section of "SOAP" Dealing with

INSECTICIDES • DISINFECTANTS • EXTERMINATING
FLOOR PRODUCTS • SANITARY SUPPLIES • MOTH PRODUCTS

POWCO
BRAND
REG. U. S. PAT. OFF.

YOUR PROBLEMS

We realize that our experience brings us much knowledge that our customers have no means to acquire, except through ourselves or someone else similarly situated.

Somehow, in connection with Pyrethrum and Rotenone Products, a great deal of misinformation manages to creep in. Our customers know that we have exerted our best efforts to dissipate such misconceptions.

When you buy Pyrethrum or Rotenone Products you want the highest quality you can get, which means the highest toxicity per dollar you pay out, plus the all important prerequisite of dependable uniformity.

You should not have to resort to guesswork in purchasing Pyrethrum Products. We have always taken this basic need for standardization very seriously. Chemical assays and biological tests on insects in our Laboratories guarantee the *killing power* of all products sold under the name of POWCO BRAND.

Insecticides made either from POWCO BRAND High Test Insect Powder or our Basic Pyrethrum Extracts give the results you seek to obtain, together with a full degree of dependability.

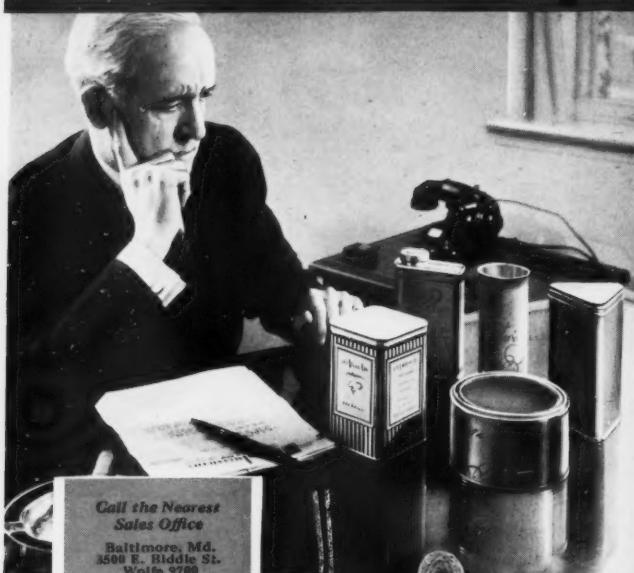
KILLING POWER—THAT'S THE THING!

JOHN POWELL & CO., Inc.

Specialists in Pyrethrum and Rotenone Products

114 East 32nd Street
New York, N. Y.

WHEN YOUR *Problem* is PACKAGING Call **CONTINENTAL**



*Call the Nearest
Sales Office*

Baltimore, Md.
3500 E. Middle St.
Wolfe 9700

Boston, Mass.
131 State St.
Hubbard 7172

Chicago, Ill.
4622 W. North Ave.
Spaulding 8450

Cincinnati, Ohio
251 Highland Ave.
Jefferson 2261

Denver, Colo.
3935 Blake St.
Tabor 4261

Detroit, Mich.
1900 E. Jefferson Ave.
Fitzroy 3292

Houston, Texas
100 N. Greenway St.
Wayside 4163

Jacksonville, Fla.
1801 W. 15th St.

Jacksonville 5-1355

Kansas City, Mo.
Guinotte & Lydia
Ave.

Victor 7259

Los Angeles, Calif.
3329 Union Pacific
Ave.
Angelus 7111

Memphis, Tenn.
265 W. Trigg Ave.
Memphis 3-4622

New Orleans, La.
521 N. Scott St.
Galvez 4145

New York City, N. Y.
100 E. 42nd St.
Ashland 4-3300

Omaha, Neb.
8th and Dodge Sts.
Omaha 1387

Philadelphia, Pa.
Room 1169
1500 Walnut St.
Peanypacker 1865

St. Louis, Mo.
P. O. Box 1242
Bridge 2550

San Francisco, Calif.
155 Montgomery St.
Garfield 7899

Syracuse, N. Y.
1016 E. Water St.
Syracuse 2-2341

Warwood,
Wheeling, W. Va.
Hardy Ave. 4384
Warwood 260



CONTINENTAL'S representatives, skilled in "packaging to sell," offer the knowledge and experience gained through years of solving the packaging problems of many diversified industries.

Coupled with their wide knowledge are Continental's large resources—41 plants strategically located from Coast to Coast . . . sales offices in principal cities . . . completely equipped Research and Development Laboratories . . . skilled Design Departments . . . and batteries of modern lithograph equipment, manned by craftsmen and aided by superior printing plates made in Continental's own master engraving plants.

A Continental representative near you, gives you ready access to the extensive packaging facilities of the entire Continental organization. Feel free to call on him for help at any time.



CONTINENTAL CAN COMPANY

NEW YORK

CHICAGO

SAN FRANCISCO

DISINFECTANTS

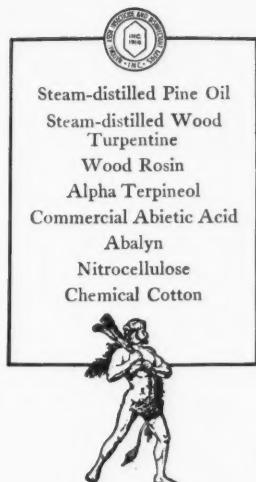
containing YARMOR

are Effective and Pleasant

The properties of disinfectants properly made with Yarmor Steam-distilled Pine Oil make them effective and pleasant to use. They have these advantages:

1. Kill disease-producing bacteria.
2. Non-toxic to human beings.
3. Do not burn body tissues.
4. Clear, sparkling amber color.
5. Milky white emulsion in water.
6. Do not stain when in diluted form.
7. Free from suspended matter, thereby denoting uniformity.
8. Leave a sweet, clean, piney odor wherever applied.

We do not manufacture disinfectants, but we do produce Yarmor Steam-distilled Pine Oil. Manufacturers and users will benefit by investigating the advantages of disinfectants containing Yarmor.



HERCULES NAVAL STORES

HERCULES POWDER COMPANY

INCORPORATED

961 Market Street, Wilmington, Delaware

BRANCH OFFICES: • CHICAGO • NEW YORK • PHILADELPHIA • ST. LOUIS • SALT LAKE CITY • SAN FRANCISCO



QQ-48

A FEW FACTS *Every Buyer of* Ground Pyrethrum Flowers *Should Know*

ON arrival, pyrethrum flowers are packed in 440 pound machine compressed bales. These are stored in the coolest available spot, so that loss of pyrethrins is at the lowest rate. The flowers are never ground until actually required. When they are ground, every effort is made to retain the pyrethrin content and deliver the material to you in the best possible condition for percolation. Before the flowers are ground they must first be broken in especially designed breakers. They are then ready to be fed into the unique grinding mills which the McLaughlin Gormley King Company have found produce the best re-

sults. The primary requirement of these grinders is that they break the achenes or "seeds" of the pyrethrum flowers.



This photograph shows whole achenes, three times their actual size. Although they are rich in

pyrethrin content it is impossible to extract the pyrethrins from the whole achenes. It is necessary, therefore, to break them. If they are not broken, much of the pyrethrin content will be lost.



This photograph graphically illustrates how a loss occurs when the grind is too coarse. Many of the achenes are still whole and although they may be high in pyrethrin content it will be practically impossible for you to extract the pyrethrins. To emphasize the necessity of cracking the achenes the following experiment was made: A sample of achenes from mature flowers was thoroughly mixed; one portion was finely ground and extracted with petroleum ether for 24 hours in a Soxhlet extractor. A second, equal portion of the unground achenes was extracted in the same way; analysis showed:

Ground achenes, 1.00 per cent pyrethrins

Whole achenes, 0.05 per cent pyrethrins

This shows that the pyrethrins cannot be extracted

from mature achenes unless they are broken and emphasizes the importance of correct grinding.

Properly ground, pyrethrum flowers will have this appearance:



You will note the achenes are all broken. At the same time the grind is kept coarse for too much fine material will clog the pipe lines and extractors. Keep these photographs and compare them with the ground pyrethrum flowers you are using.

Write us for quotations on whole, ground, or fine powdered pyrethrum flowers of known pyrethrin content. They are warehoused for your convenience. We also offer Pyrocide 20 which is guaranteed to contain 2.0 grams of pyrethrins per 100 cc., equivalent to 2.4 per cent pyrethrins, by the copper reduction method. Pyrocide 20 is available only in bulk and only to recognized manufacturers of insecticides. Warehouse stocks are carried in New York, Los Angeles, Minneapolis, and many foreign cities.

McLAUGHLIN GORMLEY KING COMPANY MINNEAPOLIS • MINNESOTA

HERE'S HOW

TO IMPROVE THE ODOR AND
INCREASE THE SALES OF -

DISINFECTANTS
INSECTICIDES
PARADICHLOR BLOCKS
THEATRE OR FLY SPRAYS

Our business is improving the odor of many products . . . and increasing the profits of the manufacturers who make them. If you make any of the above items you'll find that you can greatly increase your sales by making your product more pleasant . . . more *buyable* —with Givaudan Reodorants. "Sell by Smell" is a slogan that is giving an impetus to many old and new lines. It will pay you to investigate the possi-

bilities it offers in helping *you* to widen your markets.

Givaudan Reodorants are powerful. Only a small quantity suffices to completely overcome unpleasant odors. And because the prices are low you can do a thorough job with Givaudan Reodorants —at very little additional cost. Write to us today for further information. We will gladly cooperate with you in helping to eliminate unpleasant odors . . . effectively and inexpensively.

G I V A U D A N
D E L A W A N N A I N C .

80 Fifth Avenue, New York, N. Y.

BRANCHES: Philadelphia, Los Angeles, Atlanta,
Cincinnati, Detroit, Dallas, Baltimore, New Orleans,
Chicago, San Francisco, Montreal, Havana.

FOR THE PROTECTION OF THE PUBLIC

SODIUM FLUORIDE

Colored

OFFICIAL NILE BLUE

THE standardization of Sodium Fluoride Colored Official Nile Blue has effectively done away with hazard to the public. No one will mistake the blue tinted powder for a food ingredient. . . Its potency as an exterminating agent maintains it as the dominant insecticide for the commercial and household destruction of insect pests. . . This General Chemical Company product excels in free-flowing quality and fluffiness.

Your inquiry, addressed to the nearest office, will receive prompt and intelligent attention.

GENERAL CHEMICAL COMPANY
40 Rector Street • New York, N. Y.

Sales Offices: Atlanta, Baltimore, Boston, Buffalo, Charlotte, Chicago, Cleveland, Denver, Kansas City, Los Angeles, Minneapolis, Philadelphia, Pittsburgh, Providence, San Francisco, St. Louis, Seattle.

In Canada: The Nichols Chemical Company, Limited, Montreal, P. Q.

*Free flowing
and Fluffy*



Reg. U.S.
Pat. Off.

Also BAKER & ADAMSON C.P.ACIDS... REAGENTS AND FINE CHEMICALS



GUY C. SMITH

Manager of Advertising and Research

Libby, McNeill & Libby

"Any American advertising manager who wants to learn the value of the Audit Bureau of Circulations need only start buying newspaper space in foreign countries. The impossibility of knowing accurately, without special and costly research, the amount and breakdown of circulation of publications in any other country, is a sharp contrast to the information which has become available to advertisers in this country by reason of the work of the A. B. C."

"But the Bureau needs the support of every important user of publication space. In my opinion it has not begun to reach any limit of its usefulness. I consider it one of the most fundamental advertising expenditure our company makes."

BERNARD LICHTENBERG

Vice President, Alexander Hamilton Institute

"Buying advertising space in newspapers and periodicals without referring to A. B. C. circulation audits is like buying a pig in a poke. The old time farmers never traded horses blind."

"The earnest attempt on the part of such organizations as the Incorporated Society of British Advertisers, the Australian Association of National Advertisers, the German Reklame-Schutzverband, and the Mexican Asociacion de Anunciantes, among others, to form an Audit Bureau in their countries based on our own A. B. C., is an indication of the fact that thoughtful advertisers around the world have seen the worth of such an organization."

- Twenty years ago there was chaos in advertising. Nobody knew what his dollars bought—whether a thousand readers or ten thousand. Nobody, except by infinite pains and shrewdness, could find out.

Could advertising, on that basis, ever have grown to its present importance? Would business ever have rested its trust in a sales weapon of metal so doubtful in assay?

Hardly, think men who today direct advertising expenditures that total millions. Through such leaders as these the Audit Bureau of Circulations came to be organized. And largely through the activities of the Bureau, there is order today in the buying of advertising space.

Once a year now, into almost every important publication office, go the auditors of the A. B. C. Every circulation record is open to them.



To no publisher, no agency are they responsible. They work directly for the Audit Bureau of Circulations, and on the directorate of this institution a majority must be advertisers.

The Bureau's Audit Reports thus give the detailed findings of experts controlled by advertisers. They bring to light the complete circulation facts.

Can any budget yield full returns without use of this only recognized method of appraising advertising space?

Can any important advertiser, whether national or local, afford to be unrepresented upon the membership roster of the Audit Bureau of Circulations?



**An Advertisement by the
AUDIT BUREAU OF CIRCULATIONS**

Executive Offices • • • Chicago



STAINLESS CATTLE SPRAY

A light colored liquid for spraying cattle to rid them of annoying flies and insects. Contains the active principle of pyrethrum. Will not stain, blister or burn, and has no disagreeable odor. A popular product with farmers and dairymen. Supplied in bulk to the distributing trade only.

PES-TOX

An efficient liquid household insecticide of the pyrethrum type, pleasantly scented. Surpasses in effectiveness the standard of the National Association of Insecticide and Disinfectant Manufacturers. Each lot carefully controlled by the Peet-Grady method. Supplied in bulk for distributors to resell under their own trade-names. Also suppliers of pyrethrum concentrate.



PINE OIL DISINFECTANTS

Made from pure steam-distilled pine oil, and agreeable in odor and dilute with water to form rich, milk-white emulsions.

HIPINE, made according to the formula of the Hygienic Laboratory has a minimum phenol coefficient of four.

ORPINE, prepared from slightly different ingredients, has a minimum coefficient of three.

CLEARPINE is a specially refined product, very light in color, and has a minimum phenol coefficient of four.

All are high-grade products, reasonably priced. Every lot chemically controlled and standardized. Supplied only in bulk to the distributing trade for resale under their own names and labels.



BAIRD & McGUIRE, Inc.
HOLBROOK, MASS. ST. LOUIS, MO.

New York City and New Jersey Representative

EASTERN STATES SUPPLY CO., 127 Troutman Street, Brooklyn, N. Y.

Phone: EVergreen 8-2498

The NEW KILLER--B-280 CHAMPION BASE HYDROCARBON OIL ...



-- will DEFEND his
TITLE against any
and all FLIES etc.

Notice the remarkable
odor before and after.

Notice to Manufacturers: We manufacture Base Hydrocarbon Oil only. We are not manufacturers of fly sprays.

B-280 is a product of Research. (When in Chicago visit our Research Laboratories at 3921 E. Ravenswood Avenue—15 minutes from the "Loop") (4500 square feet of floor space devoted to Petroleum Research for Industries).

Ask the Cleaning Industry about "STOD-SOL"; the Rubber Industry about "RUB-SOL" or "PETROBENZOL"; the Lacquer Industry about "TROLUOIL"; the Varnish Industry about "APCOTHINNER," they are all Internationally known "Industrial Naphthas" manufactured by this company. We now enter your Industry and offer "B-280" for your approval.

For technical data or samples, address the company at 3921 East Ravenswood Avenue, Chicago, Ill.

ANDERSON-PRICHARD OIL CORPORATION



OKLAHOMA CITY, OKLA.

BRANCHES IN ALL PRINCIPAL CITIES

FOR YOUR
Paradichlorbenzene
 AND *Naphthalene*
 REQUEST SAMPLES OF

COLOROMES

COLOROMES have been especially developed by Felton Chemical Co. to perfume and color Paradichlor-Benzene and Naphthalene blocks or crystals in one single, simple operation.

Extensive research has resulted in the formulation of products which completely neutralize the inherently disagreeable odor of Para and Naphthalene and leave only a pleasant fragrance which persists until the last trace of the block or crystal has disappeared.

COLOROMES are available in any of the popular odors and with any desired color, of exceptional fastness.

Coloromes are also supplied without color.

Priced to meet the demands of present day competition.

FELTON CHEMICAL COMPANY, Inc.

603 JOHNSON AVENUE, BROOKLYN, N. Y.

AROMATIC CHEMICALS — NATURAL ISOLATES — PERFUME OILS — ARTIFICIAL FLOWER AND FLAVOR OILS

Stocks carried in following cities:

Chicago, Ill.
 1200 N. Ashland Ave.

New Orleans, La.
 ROBERT E. FELTON
 Balter Bldg.

St. Louis, Mo.
 KIEFER SALES
 & ADV. SERVICE
 1014 Locust St.

A COMPLETE SERVICE
 FOR THE WEST

FELTON CHEMICAL CO.
 INC.
 515 So. Fairfax Ave.
 Los Angeles, Calif.



Specialists in doing
one thing well



Reg. U. S. Patent Office

For over a quarter
century manufacturers of

TESTED and CERTIFIED

DISINFECTANTS

for the wholesale trade



BAIRD & McGUIRE, Inc.
HOLBROOK, MASS. ST. LOUIS, MO.

New York City and New Jersey Representative
EASTERN STATES SUPPLY CO., 127 Troutman Street, Brooklyn, N. Y.
Phone: EVERgreen 8-2498





SANITARY PRODUCTS



A Section of SOAP

Official Publication, Nat'l. Assn. of Insecticide & Disinfectant Manufacturers

EDITORIAL

WHAT is wrong with household insecticide sales? Are prices too high,—or is quality too low in some cases? Is the industry barking up the wrong tree when it comes to advertising and merchandising? This is one of the subjects which will be discussed at the twenty-first annual meeting of the National Association of Insecticide and Disinfectant Manufacturers when it meets in New York on December 10 and 11. The chances are that this discussion will not be published.

How much should a sanitary supply salesman earn? What rate of commission should he be paid? These and a number of other interesting and important subjects will likewise be discussed. Membership in the Association represents the privilege to sit in on these and many other discussions equally important. It should not be passed up! — • —

THE suggestion comes from a well-known authority on odors that it is a mistake to attempt to sell the same liquid insecticide for use in all places. He suggests that for hospitals, one type of odor or no odor at all is the thing, while for bakeries, hotel bedrooms, restaurants, lavatories, and innumerable other places, each has a special odor problem and each must have an individual and suitable odor. For an insecticide manufacturer selling his products in twenty or more different channels, this idea presents obstacles which might seem to label the plan as impracticable. For the large manufacturer,

selling nationally in small packages, the plan is quite obviously not practical, but for the smaller firms, it might be the means of getting business from sources which today are using little or no insecticide. There also is the possibility of better prices which specialities can usually command. — • —

IN ORDER to swell their volume of business at the expense of other retailers, the drug store owners of the country have for years sought to have adopted in various states and municipalities laws which would restrict the sale of numerous products to the druggist. Products of a poisonous nature, such as some disinfectants, insecticides, and other sanitary products, have been frequent targets. The druggist wants the sale of these goods for himself alone. He wants the grocer, the hardware dealer, the general store prevented from selling them. At the same time, the druggist wants to continue to sell everything from phonograph records to popcorn. The inconsistencies of the thing are of secondary importance. The retail druggists are banded together into strong local and national associations. They wield powerful political weapons and do not hesitate to use them. Once they become firmly entrenched in a few states, their chances of success in others are greater. If the manufacturers of disinfectants, many insecticides, and a host of other sanitary products do not want their sales restricted more and more to the drug store, they had best prepare to fight.

National Association of Insecticide and Disinfectant Manufacturers

OFFICERS

President	Peter Dougan Merck & Co., Rahway, N. J.
1st Vice-President	W. J. Andree Sinclair Refining Co., New York
2nd Vice-President	Dr. George Reddish Lambert Pharmacal Co., St. Louis
Secretary	John H. Wright Zoneite Products Corp., New York
Treasurer	John Powell John Powell & Co., New York

BOARD OF GOVERNORS

Samuel H. Bell	Koppers Products Co., Pittsburgh
J. L. Brenn	Huntington Laboratories, Huntington, Ind.
Harry W. Cole	Baird & McGuire, Inc., Holbrook, Mass.
William H. Gesell	Lehn & Fink, Inc., Bloomfield, N. J.
H. W. Hamilton	White Tar Co., Kearny, N. J.
C. P. McCormick	McCormick & Co., Baltimore
Dr. Charles H. Peet	Rohm & Haas, Inc., Philadelphia
S. S. Selig	The Selig Co., Atlanta
Dr. Robert C. White	Robert C. White Co., Philadelphia
William J. Zick	Stanco, Inc., New York

MEMBERSHIP

Active—Open to manufacturers and wholesale distributors of disinfectants, germicides, deodorants, insecticides, liquid soaps, polishes, and allied products. Dues—\$75.00 per year.

Associate—Open to firms supplying raw materials, containers, equipment, etc., to the membership. Dues—\$50.00 per year.

For further details, communicate with

**NATIONAL ASSOCIATION OF
INSECTICIDE & DISINFECTANT
MANUFACTURERS**

John H. Wright, Secretary

CHRYSLER BUILDING

NEW YORK

Notes of the Trade

Edwin B. Loveland, formerly advertising manager for Stanco, Inc., New York, has recently taken a position as head of National Comic Advertising Syndicate.

Cardinal Chemical Corp. has been organized in Toronto to manufacture germicides and other chemical specialties. The new firm has taken over the business and equipment of W. R. Hill Chemical Co., Aurora, Ont. Offices are located at 172 John Street, Toronto.

Ralph Gretsch, vice-president of the White Tar Co. of N. J., Kearny, N. J., severed his connection with that company Oct. 15. He has formed the Ralph Gretsch Co., with offices at 230 Fifth Avenue, New York, to specialize in moth proofing materials.

"Baxol," an all-purpose disinfectant manufactured by the Laundex Chemical Co., San Francisco, is being introduced in the southeast by Bessire & Co., Atlanta.

Capital Sanitary Products Co. has been incorporated in Chicago, by Herbert Spielman, Beatrice F. Spielman and Jacob I. Rudolph. Offices are at 2406 LeMoyne Ave. The concern deals in soaps, insecticides, deodorants, etc.

Elkay Products Corp., New York, specialists in moth products, have taken additional space at their present location. Another addition to their line of insecticides is "Kill-Krystals," for use by storage warehouses, woolen mills, furriers, etc.

Palmer Products, Inc., Waukesha, Wis., recently introduced a new disinfecting toilet soap under the name "Cledosid."

G. E. Specialty Company, manufacturers of "Flyfo" insecticide, also polishes and waxes, formerly located at 458 Livonia Avenue, New York, recently moved to larger quarters at 155 Quincy Street, Brooklyn.

Loren B. Smith has been appointed manager of research of the Chipman Chemical Company, Bound Brook, N. J. Mr. Smith was former state entomologist at Pennsylvania State College.

A new method of measuring germicidal strength by use of an instrument called the densitometer was described by Dr. Harold Mestres, Yale University, at a recent meeting of the Optical Society of America. Dr. Mestres' method is based upon the fact that the size and number of bacteria in a suspension in solution determine the amount of light which will pass through the containing vessel.

Insecticide and Disinfectant Meeting, Dec. 10-11 in New York

THE 21st Annual Meeting of the National Association of Insecticide and Disinfectant Manufacturers will be held at the Hotel McAlpin, New York, on December 10 and 11. The meeting of the Association will be preceded by the regular annual session of the Board of Governors on Sunday evening, December 9. The convention sessions will extend for two days, closing with the annual informal banquet on Tuesday evening, December 11. Subjects of both scientific and commercial importance will be discussed at the sessions of the meeting. Manufacture and testing of insecticides and disinfectants, uses of these products, new technical developments, and associated subjects will be discussed. Commercial topics will include discussions of compensation for sanitary supply salesmen, sales problems of the household insecticide industry, new and proposed legislation, the industry code, traffic and shipping problems, development of new sales outlets, and others.

Outside of the regular meeting sessions, the program this year will be changed slightly. Luncheons will be served each day as heretofore. The annual banquet, however, will be held at the Downtown Athletic Club in New York. It will begin with a special cocktail hour at 6:00 P.M. on Tuesday evening, December 11. Dinner will be served at 7:00 during which there will be entertainment. Following dinner, the entire group will attend a special series of twelve boxing bouts in the club gymnasium. The entire evening will be included in the cost of the regular banquet tickets. A floor of the club building will be set aside for the exclusive use of the Association members and guests for the evening.

H. W. Hamilton of the White Tar Co., chairman of the convention committee, states that the Hotel McAlpin is offering special low room rates for the meeting, prices starting as low as \$2.50 single. He urges all members to send in their room reservations early direct to the hotel, mentioning the insecticide and disinfectant convention so that the special rates may be obtained. He also states that there will be numerous informal get-togethers on Sunday afternoon, December 9, and suggests that members plan to arrive on that day. Various committees are also planning to meet at that time.

In addition to Mr. Hamilton, the convention committee consists of Joseph A. Walsh of C. B. Dolge Co., in charge of the program; John Powell, of John Powell & Co., in charge of general arrangements, and Grant A. Dorland of the MacNair-Dorland Co., in charge of entertainment. Registration will be in charge of Robert C. Kelly of John Powell & Co. Registration tickets covering the full meeting will be fifteen dollars per person as heretofore.



The 21st Annual Meeting of the National Association of the Insecticide and Disinfectant Industries will find them returning to the Hotel McAlpin, Dec. 10 and 11.

Further details regarding the meeting may be obtained by communicating with the office of the Association in the Chrysler Building, New York.

The preliminary draft of the program is announced by the committee and subject to later modification, follows:

PROGRAM

First Session

- 9:30—Registration.
- 10:30—Meeting called to order.
 - Appointment of Resolutions Committee.
 - Communications.
- 10:45—Report of President—Peter Dougan, Merck & Co.
- 11:00—Report of Treasurer—John Powell, John Powell & Co.
- 11:15—Report of Program Committee—Joseph A. Walsh, C. B. Dolge Co.
 - Report of Entertainment Committee—Grant Dorland, MacNair-Dorland Co.
- 11:30—Report of Secretary—John H. Wright, Zonite Corp.

- 12:00—Election of Committee on Nominations.
 12:10—Report of Committee on Disinfectant Standardization—Dr. Wm. Dreyfus West Disinfecting Co.
 12:20—Result of Balloting on election of Nominating Committee.
 12:30—Adjournment for lunch.

Second Session—Monday P. M.

- 2:00—Action on Proposed Amendments to Constitution and By-Laws.
 2:10—Report, National Councillor, Chamber of Commerce, U. S., F. W. Wolff, E. I. Du Pont de Nemours & Co.
 2:20—Discussion, Code Matters—Dr. Robert C. White, chairman, Code Authority.
 2:30—Report of Scientific Committee on Insecticides,—Dr. Alfred Weed, John Powell & Co.
 3:00—"Railroad Carrier Service and Shipper's Traffic Problems"—George D. Ogden, Asst. Vice President, Traffic, Pennsylvania Railroad.
 3:15—Report, Disinfectant Committee—Dr. G. F. Reddish, Lambert Pharmacal Co.
 3:30—"Cleaning and Disinfecting the Dairy Plant"—Prof. H. J. Brueckner, Dept. of Dairy Manufacture, Cornell University.
 4:00—Report of Committee on Standardization of Insecticides—Dr. Charles H. Peet, Rohm & Haas Co.
 4:30—Report of Committee of Disinfectant Scientific Section—Dr. Emil Klarmann, Lehn & Fink, Inc.

Third Session—Tuesday A. M.

- 10:00—Report of Committee on Insecticides—William Bohlen, Sinclair Refining Co.
 10:15—Report of Survey on the Question of "Compensation of Sanitary Supply Salesmen"—read by Ira P. MacNair with discussion leaders.
 10:45—"High vs. Low Coefficient Disinfectants"—Dr. George Reddish, Lambert Pharmacal Co.
 11:15—Report of Committee on Amendment to Insecticide Act—Peter Dougan, Merck & Co.
 11:30—Report of Liquid Soap Committee—R. H. Young, Davies-Young Soap Co.
 11:45—Report of Committee on Nominations.

Fourth Session—Tuesday P. M.

- 2:00—Report of Nomenclature Committee—Dr. H. D. Pease, Pease Laboratories.
 2:15—Report on Survey of Current Commercial Problems of the Insecticide Industry—(To be read and discussed).
 2:45—"Recent Advances in Our Knowledge of Derris and Pyrethrum"—Dr. R. C. Roark, Chief Insecticide Division, Bureau of Entomology and Plant Quarantine, U. S. Dept. of Agriculture. Discussion leader—R. B. Stoddard, William Benkert & Co.
 3:15—Modifications of the Peet-Grady Method, with demonstration of the new turn-table method of testing—Dr. F. L. Campbell, Entomologist in charge, Section of Insect Physiology and Toxicology, Bureau of Entomology and Plant Quarantine, U. S. Dept. of Agriculture.
 3:45—"The Purposes of the American Liberty League"—E. F. Hutton, E. F. Hutton Co.
 4:15—"Problems Common to the Household and the Agricultural Insecticide Industries"—Lea S. Hitchner, Code Authority, Agricultural Insecticide and Fungicide Industry.
 4:45—Election of Officers and Board of Governors.

Informal Banquet

- 6:00—Banquet (Details to be announced later by Entertainment Committee).

An insecticide comprises a solution of an insecticidal plant extract and/or a compound of the group consisting of esters and ethers of benzoic acid in a hydrogenated mineral oil boiling between 100 and 300° C. and having a specific gravity of 0.75-0.85 at 20° C. The International Hydrogenation Patents Company, Ltd. Canadian Patent No. 345,383.

An aggressive advertising campaign is being conducted on "Hy-Gee," a floor wax being marketed by E. S. Evans & Sons, Detroit. The product is said to have a germicidal action in addition to its polishing properties. The importance of this feature is being stressed in advertising copy which is handled by Brooke, Smith & French, Inc. The product is said to retain its germicidal efficiency for as long as seven days after application.

Murray R. Director, Los Angeles, an individual manufacturing a vermin exterminator under the name of Murray Director Company, has agreed to cease using the words "Absolutely harmless to human beings, domestic animals and poultry" in advertising his product under the trade name "Murdirat." Director will also cease using any other words which would tend to mislead buyers into believing that his product is harmless to human beings and to domestic animals or poultry.

The best single nonarsenical treatment found for cauliflower worm control was ground derris root admixed with a diluent so as to contain 0.5 per cent of rotenone. This is a dilution of the crude ground root of approximately 1 to 10. The dust should be applied at the rate of 25-30 pounds to the acre. G. E. R. Hervey and C. E. Palm. N. Y. Agr. Expt. Sta., *Bull. 640*, 17 pp. (1934).

Lambert Pharmacal Co. will sponsor broadcasts of a series of thirteen performances of the Metropolitan Opera House, New York, during the coming season, it has been announced by the Lambert advertising agents. Total cost to Lambert, including time and other charges, will be approximately \$375,000.

A constant demand exists in Spain for automobile polishes, and supplies are required to finish over 175,000 motor vehicles which are estimated to be in operation. A number of domestic manufacturers are engaged in the production of various types of polish, but although definite figures covering output are unavailable, domestic products are competing with foreign merchandise. Principal foreign brands appearing on the market besides American products are French, German and British. Imports of automobile polishes into Spain are classified under the group "Pastes and Liquids for Polishing Metals," imports of which for Spain were 219 metric quintals valued at 32,649 gold pesetas in 1933.

Termites and Their Control

By DR. F. E. CISLAK*

Director, Organic Research Division

The Reilly Laboratories

NATURE, in her scheme of things, has assigned to termites the definite role of converting wood cellulose and returning it to the soil and to the air. Termites have been doing this thing for over a million years. Man has been particularly helpful to these insects in carrying out this task that nature has assigned to them. Dr. Charles A. Kofoid, of the University of California, very nicely phrased the role played by man in aiding the termite in his biological scheme of things:

"Man's relation to the termite's cellulose cycle is an important one in that he makes available to the termite large concentrated stores of cellulose. He groups wood in building in cities and villages, and spaces it conveniently along his lines of transportation in pole lines and fence posts, often with exposed sapwood. These foster the local concentrations of infestations, facilitate the spread of termites from one locality to another, and assist in the extension of infestations from the already existing natural reservoirs of the different species. Man buries timber in soil already inhabited by termites that have been accustomed to find their natural food supply in roots and stumps of forest and field. He places his houses, barns, and other structures in contact with the earth, thus favoring infestation by subterranean and dampwood termites. He builds structures with convenient crevices in roofs and walls, into which dry-wood termites may find entrance and establish colonies. Man extensively provides conveniently grouped and comfortably heated homes for these wood-eating insects. The social organization of the human species thus supplements and favors the maintenance and spread of these social insects by providing alike food and shelter, grouped and distributed most favorably for the organized life of the termite."

Until quite recently man has, however, done nothing, or comparatively little, to stop the progress of these wood destroying insects. The home owners have now come to realize that a termite menace does exist and they do want to know what to do about it. To combat termites effectively, it is, of course, necessary to learn something concerning their habits. Herein is presented a brief discussion of some of the more pertinent modes of their lives, especial attention being given to the effect these habits have on termite control.

Termites are only too often referred to as "white ants," whereas the termites are not related to ants, but are

most closely akin to the cockroach. They have, however, for many years, been quite distinct from the cockroach. According to their mode of life, termites can be grouped into two broad classifications: Wood dwelling and earth dwelling termites. The wood dwelling termites make their colonies in the wood and, with the exception of the reproductives which swarm at certain periods of their life, the members of the colony live entirely within that wood. The earth dwelling termites live both in the wood and in the ground, but they always maintain a ground contact.

The wood dwelling termites can be further subdivided into two broad classifications: The damp wood termites and the dry wood termites. The damp wood termites require a large amount of moisture for their life cycle and, therefore, are mostly found in decaying wood. Damp wood termites do, however, attack sound wood when a source of water is particularly easily available, such as the wood in water tanks, piling, and poles that are buried in ground that is particularly damp; so, although the damp wood termite is usually found in decaying wood, it can and does attack the soundest of wood. The amount of damage caused by the damp wood termite is not particularly large and is not of any particular economic importance. The damp wood termites are confined largely to the Pacific Coast.

Dry wood termites confine their activities to the dry, sound wood. The amount of moisture required by these termites varies; some can live in extremely dry wood, others require wood with a moisture content of about ten per cent. These termites are also confined to the Pacific Coast and to the southern states. Although the amount of damage done by the dry wood termite is not very great, they present a real problem to combat, because of the ease with which they can get to the wood; they can make their way through the smallest crevice, such as a crack that appears in the seasoning of the wood, and so on. The damage these insects do is probably larger than we realize, but because they do not structurally weaken the home, the damage is often unnoticed or unreported.

Of the earth dwelling type of termites there are several different species: The subterranean termite, the desert termite, mound builders, and so on. Of this group the subterranean termite is of greatest economic importance, as practically all, or at least ninety per cent, of the damage caused by termites is caused by the subterranean group.

The subterranean termite starts new colonies either

*Original paper read by Dr. Cislak before Nat'l Assn. of Exterminators and Fumigators, St. Louis, Oct. 2. This extract prepared for SOAP by Dr. Cislak.

TO PYRETHRUM BUYERS

What Do You Believe?



Do you believe that some suppliers get only special hand-picked Pyrethrum Flowers of unusually high Pyrethrin content?



Do you believe in the existence of some mysterious method of milling which not only prevents loss but protects the material against later deterioration?



Do you believe that an unreasonably high claim as to Pyrethrin content means that you will get correspondingly high-test material?



Do you believe that Pyrethrum Flowers test as high in May as they do in October?



If you are skeptical about these and similar claims perhaps we can do business with you on a "bunkless" basis.

W. BENKERT & CO., INC.

100 GOLD STREET

NEW YORK, N. Y.

in the earth or in moist, decayed wood in contact with the earth, but regardless of whether they start their colony in the wood or in the earth, they eventually end up by making a contact with the ground and maintain this contact in practically all cases. The exact purpose of this ground contact is not understood; however, it is known that the subterranean termites normally obtain their moisture requirements from the ground. Whether this ground contact also serves to give them the necessary molds and fungi to aid in the digestion of the wood is not known, although it is believed to be the case.

Termites are social insects. A cockroach or bee will live by itself, but a termite never lives by itself; termites are always grouped together in their social colonies. The termite society has developed to the large proportion it is now because of the ability of these insects to utilize wood cellulose as their food. In this way they have a constantly available source of food and they need not compete for their food supply with other insects.

Another habit of the termites which is responsible for their large propagation is the fact that they confine themselves in narrow galleries either in the wood alone or in galleries both in the wood and in the earth. The wood dwelling species have their galleries in the wood only, whereas the subterranean type lives in both the wood and the ground. In this way they are protected from their natural enemies, particularly the ants, and survive in spite of their stronger enemies.

THE work of the termites is divided among the various members within the colony. Every termite colony has at least two castes, the productive and the soldier castes; most of the species have another caste called the workers. In addition to these, there exists a group that has not quite reached their final form, and these are called the nymphs.

To the reproductive caste is assigned the task of maintaining the colony and of establishing new colonies. In a normal adult colony there are two types of reproductives, the primary reproductives (queen and king) and supplementary reproductives. As soon as the queen is killed, the supplementary reproductives come into play and begin the task of laying eggs. This is an important point in maintaining a colony. It makes a termite colony practically immortal from the standpoint of dying out because of the killing of the reproductives. Thus, killing the queen of a colony does not destroy it; the colony is only temporarily arrested, the supplementary reproductives come into play and the colony again flourishes.

The function of the soldiers, as the name indicates, is to protect the colony from invasion by enemies of the termites. These soldiers are truly specialists in the art of defense. They have so developed themselves for defending the colony that they are unable to feed themselves, but must be fed by the workers or nymphs. The workers and nymphs do the destructive work in the colony; they actually destroy the wood.

One of the most interesting aspects of termites is their swarming. Termites, as a rule, flee from light; they want to hide in crevices, to get away from that light. There are, however, certain periods when the reproductives actually emerge into the light to found new colonies.

Alates, as the winged termites are called, are found in all colonies that are two years or more old. At certain times these alates come into being and wait in the colony, sometimes for even three months, until the atmospheric conditions become favorable for their flight; the two most important factors are temperature and humidity. Once the conditions have become right for their swarming period, the nymphs and workers open passage ways out of the colony and the alates swarm and go out seeking a new dwelling place. The distance covered by the alates in their flight varies with the species; as a rule, the wood dwelling termites fly farther than the earth dwelling type. Dr. Snyder, in his studies, has shown that the wind and air currents play an important part in determining the distance to which the workers are carried. He has shown that winds carry the swarming alates long distances.

The swarming flight is only one of the series of events that precede the founding of a new colony. Immediately after alighting from the swarming flights the alates automatically shed their wings. This process is called dealation. After this process there is a pairing up of the male and female termite. Then the pair seeks a crevice in the wood or burrows in the ground, depending on whether they are of the wood dwelling or earth dwelling type. The colony is thus founded and the queen begins her task of laying the eggs and rearing the first of the young. After she has reared the first of the young, they take care of her and feed her.

The gut of the termites is inhabited by protozoa. Without these unicellular organisms the termites would not be able to digest the cellulose they eat. In this utilization of cellulose the termite is aided by another group of organisms called the fungi. Researches by Dr. Snyder and more recent investigations by Miss Hendee and Dr. Kofoid, of the University of California, have shown that there is a close and lasting association between termites and fungi. Some thirty-three different genera of fungi have been identified as being present with termites of various types.

It has been shown that termites are responsible not only for destruction caused by themselves, but also for the introduction of fungi into the wood that they enter, thereby causing the wood to decay. The termites provide shelter and a humid atmosphere favorable to fungus growth, they carry the spores of the fungi on their bodies, in their gut and on the pellets, distributing these fungi deeply into the soundest of timbers. Often when it is believed that wood was destroyed by decay, careful examination would reveal that termites were there first and, after the extinction of the termite colony, the fungi continued their work of destruction.

This close association of termites and fungi is of con-

Your Convention Meets Here!

in the

"Centre of Convenience"

December 10th and 11th



Across the street from the McAlpin are the world's largest department stores—the world's greatest shopping centre. The garment, textile and shoe industries have their many offices in the immediate district.

Hotel McAlpin is one block from Pennsylvania Station—five minutes walk from Times Square and the theatrical district—one block from Fifth Avenue and its smart shops. Street cars, buses, subways and "L" trains pass the door of the McAlpin.

World-Famous Hotel McAlpin—Broadway at 34th Street

It is both a privilege and a pleasure to the McAlpin to serve the Twenty-first Anniversary Convention of the National Association of Insecticide and Disinfectant Manufacturers. You may expect every convention facility plus the famed McAlpin service, always courteous, prompt and efficient.

As for accommodations, all McAlpin rooms are large, luxuriously furnished and immaculate.

We do more than promise you 100% comfort and convenience—we guarantee it. Please wire, write or phone your reservation—to me personally, if you prefer.

John J. Woelfle, Manager.

ROOMS with Bath

from

\$2.50 per day single	\$4.00 per day double	\$4.50 per day twin-bedded
--------------------------	--------------------------	-------------------------------

HOTEL McALPIN

Convention Headquarters

BROADWAY AT 34th STREET

NEW YORK

siderable importance in the control of termite damage; it necessitates a very careful study of the chemicals that are going to be used in eradicating termites.

Recently the work of Dr. Thom and Mr. Raper, of the Department of Agriculture in Washington, has once again revived the interest in a group of fungi which convert arsenic into gaseous poisons, arsines. This work did not bring forth any startling new facts; it just once again called attention to the fact that there are fungi and molds that are capable of thriving on arsenic compounds, changing those compounds into gaseous poisons which in turn present a health hazard. It has long been known that wallpaper containing as much as one-tenth of a grain of arsenic per square foot presents a decided health hazard. In Great Britain deaths have been traced to the use of such wallpaper, and practically all wallpaper is now free of arsenic containing compounds.

Recent investigations by Dr. Kofoid, of the University of California, have conclusively shown that the fungi associated with termites are capable of, and do convert arsenic into gaseous arsines. Because of this ability of these fungi to convert arsenic into these deadly poisons, extreme care should be exercised where and when arsenic-containing compounds are used in habitations of humans. The health hazard that is involved in the use of these arsenicals is very great, and all termite controllers should bear this fact in mind when they are using any arsenical preparation for combating termite damage.

The subterranean termites attack the wood from the ground, hence they most commonly damage the wood in contact with the ground. Among the places where subterranean termite damage is most commonly found are the following: Wood framing members in contact with the ground because of low foundation or because of earth fill under concrete porches, wood mud-sills and woodjoists in contact with the ground, wood footings, exterior wood porches and steps in contact with the ground, fuel wood left from construction, etc., under buildings, posts extending through concrete floor to ground, exterior wood siding in contact with ground, wood frame around foundation vents, form boards used in placing concrete and on removal, lumber in brick-veneer construction—termites enter through mortar joints—under refrigerator drains, around roof drain pipes, near shrubbery or planting areas, around stucco bound to concrete, wood girders entering foundation walls, and wood placed near chimneys.

THE control of termite damage, as it confronts the exterminator, presents a two-fold problem: First, the elimination of the termites already present in the building; and second, the prevention of future infestation. It is self-evident that the successful termite operator must be able to meet both phases of this problem. It is most imperative that he be certain his treatment will not only eradicate the insects already in the building but that it will also definitely afford permanent protection against

termite attacks. The successful control of termite damage depends upon both the material used and the method of applying this material. The best material, not properly used, will be ineffective in preventing these voracious insects from damaging buildings.

For several years, our laboratories in cooperation with the Termite Investigations Committee of California, have studied all phases of the protection of wood against termites and decay. These investigations have given us a new type of penetrating creosote, which in contrast to the oiliness and black color which crude creosotes impart to the wood, does not change the color of the wood and leaves it dry, not oily.

In protecting existing buildings against termite damage there are four distinct tasks to be performed: Replacing damaged timber, removing all scraps of wood, treating the ground, and treating the wood. Each of these tasks supplements the others; the omission of any of them leaves the structure vulnerable to termite attack. These voracious insects are almost uncanny in detecting the presence of wood and in working their way to it. Only careful, thorough methods will keep them out.

I.—Remove All Structurally Weakened Timbers. All termite-infested timbers which have become structurally weakened must be removed and burned. All damaged timber should be replaced with wood properly treated, with a suitable preservative.

II.—Remove All Scraps of Wood. Any wood left lying on the ground or tree stump left in the ground is an attraction for the termites and frequently is responsible for infestation of the building. Remove all stumps, wood scraps and shoring from beneath the building and particularly all refuse wood which may be buried beneath the house; also the wood forms used in the construction of concrete foundations, walls, floors, walks, etc. Provide adequate ventilation and illumination beneath the house.

III.—Ground Treatment. The subterranean termites attack the wood from the ground; they must maintain contact with the ground. Therefore, if a barrier of poisoned ground is put around the house, the termite cannot get through it to attack the wood. Here it should be emphasized that a ground treatment alone is insufficient; this has been demonstrated time and time again.

Destroy the tubes or runways made by termites leading from the soil to the wood. These tubes are frequently plastered against the face of the concrete foundation; or the tubes may lead freely turret-like from the soil to the wood. These must be torn down. Remove the earth in contact with the wooden structure of the house.

Along the foundation wall, on the outside and where there is no concrete floor also on the inside, a trench about 6 inches wide and 8 to 10 inches deep should be dug. Into this trench pour about one gallon of creosote for every fifteen lineal feet. The earth removed from this trench should be thoroughly saturated with this preservative. This is best accomplished by mixing it as

(Turn to Page 107)



No. 67
ANCHOR AMERSEAL
METAL BOX



THE secret of the No. 67 Anchor Amerseal Metal Box shown here is just this . . . it is designed for the human hand. Generous knurling on both box and cover give the fingers something substantial to grip. The absence of exposed raw edges prevents both cuts on the fingers and injuries to the disposition. Best of all, the cover itself is a regular Anchor Amerseal Cap that requires only an easy quarter turn to remove or replace—giving to your consumers the same handy convenience they've known for years on glass-packed products.

For protection, it has no equal. Shoe polishes, metal polishes, ointments, salves, pomades, window cleaning preparations, metallic diamonds are all represented in the picture. Anchor's No. 67 Amerseal Box is suited to any paste or semi-solid, causing them to retain their moisture and correct consistency; they do not dry up because of the tight, sure fit and because these box covers are never mutilated or sprung out of shape in removal.

In the interest of more convenient packages, better kept products and greater consumer satisfaction, investigate the No. 67 Anchor Amerseal Metal Box. Supplied in $2\frac{1}{16}$ or $1\frac{3}{4}$ oz. capacities, the cover flat or domed, lithographed as desired. Samples and details gladly supplied on request. Write for them today.

ANCHOR CAP & CLOSURE CORPORATION
LONG ISLAND CITY, N. Y. TORONTO, CAN.
Branch Offices: ATLANTA • BALTIMORE • BOSTON • CHICAGO
CINCINNATI • CLEVELAND • DETROIT • HOUSTON • LOS ANGELES
LOUISVILLE • MONTREAL • NEW YORK • PHILADELPHIA • PITTSBURGH • ROCHESTER • SAN FRANCISCO • ST. LOUIS • TORONTO

ANCHOR CLOSURES FOR POLISHES & SPECIALTIES

New Insecticide, Germicide, and Disinfectant Patents

By DR. R. C. ROARK

Insecticide Division, Bureau of Chemistry & Soils

PATENTS covering household insecticides, disinfectants, fumigants, germicides, rodenticides, and allied products, reviewed during the past year in the regular service of the Insecticide Division of the Bureau of Chemistry and Soils under the title "Review of United States Patents Relating to Pest Control," are outlined in the following summary. This data is published from time to time in the Sanitary Products Section of *Soap* so that it may be readily available to interested manufacturers and others.

1,921,158. Insecticide. Eric T. Hessle, Lockport, Ill. Midwest Chemical Co., Chicago, Ill. An insecticide composition comprises an emulsion of a non-toxic, substantially saturated, liquid hydrocarbon product and an emulsifying agent in water, said emulsifying agent comprising toxic hydrocarbon sulphones and sulphonic acids.

1,921,821. Insect Repeller. Walter E. Higgins, Waterloo, Iowa. A container for a liquid repellent with means for fastening it upon a screen door or the like, has a porous element for receiving and delivering the repellent in vaporous form and evenly through the adjacent atmosphere, to repel such insects as flies or mosquitoes, to a distance which prevents their entry into a building.

1,921,926. Method of Moth Proofing Textiles. Hilton I. Jones, Wilmette, Ill. A process of treating fabrics to render them moth-proof and water repellent consists in passing the fabric through a bath composed of a mixture of aqueous solutions of egg albumin and a rare earth acetate so proportioned as to prevent precipitation in the bath, and subsequently wringing and drying the fabric. In carrying out this invention there are prepared two solutions which are designated solutions I and II, respectively. In Solution I, there may be used the following ingredients in the proportions specified: Solution I—6 pounds egg albumin, dissolved in warm water and made up to 125 gallons. Solution II—66 pounds cerium acetate, dissolved in water and made up to 250 gallons. Solutions I and II are now thoroughly mixed and constitute the bath for rendering the fabric moth, mildew, and mold-proof, as well as highly water-repellent. In treating the goods, the fabric is drawn through this single bath, which as stated, is a mixture of solutions I and II, wrung out, and dried. No after-washing is required. The particular feature of this process to which it is desired to call attention is the fact that by using the albumin of the proper strength it is possible to secure a protective colloidal effect which prevents precipitation in the solution. In the example given of solution II cerium acetate has been named, but other rare earths such as thorium, lanthanum, may be used, as well as corresponding acetates of aluminum, tin, zinc, copper, and the like.

1,923,223. Moth Proofing Substances. Wilhelm Lommel and Heinrich Müntzel, Leverkusen-Wiesdorf-on-the-Rhine, Germany. I. G. Farbenindustrie, A. G., Frankfort-on-the-Main, Germany. The patentees claim as a new moth-proofing substance a colorless strontium salt, being soluble either in water or in organic solvents, and which does not possess a poisonous anion. For example, the wool which is to be rendered moth-proof is treated with an

aqueous solution containing 0.4% strontium chloride ($\text{SrCl}_2 \cdot 6\text{H}_2\text{O}$) in such a manner that after centrifuging the wool 1% of the strontium chloride calculated on the weight of the wool remains, whereupon the wool is permanently protected against attack by moths. For working in benzene solution some fatty acid salts, such as strontium oleate, which is readily soluble therein are suitable; for working with alcoholic solutions strontium acetate or strontium salicylate, for example, may be employed. Strontium salts from other inorganic or organic acids, such as sulfonic acids and their derivatives can also be used.

1,924,507. Compound for Repelling Insects. Alfred Markowsky, Woodbridge, N. J. A mixture for the protection of garments from moths and the like consists of paradichlorobenzene and paranitrochlorobenzene, the said substances being proportioned one to the other whereby the mixture contains at least 20% of paranitrochlorobenzene will not soften sufficiently to smear garments at degrees of excessive summer heat up to 100° F.

1,925,225. Insecticide Material. Robert B. Arnold, Richmond, Va. Tobacco By-Products and Chemical Corporation, Louisville, Ky. An insecticide material comprises the reaction products of an anabasine alkaloid and tannic acid. One desirable formula is as follows: Anabasine alkaloids containing about 35% of beta-pyridyl-alpha-piper-idine, 50 pounds; ground and sifted Chinese gall-nuts, 115 pounds. Add the ground gall-nuts to about 50 gallons of water and stir for half an hour. Dilute the 50 pounds of anabasine alkaloids to about 25 gallons with water and pour or pump this solution into the 50 gallons containing the gall-nuts. Mix thoroughly. A voluminous precipitate of the tannates of the anabasine alkaloids will be formed, mixed with the insoluble portion of the gall-nuts. Filter, dry the solid residue at a low temperature and grind it to a finer powder.

1,926,579. Method of Destroying Insects with Pyrethrum. Walter S. Burgess and Earl K. Golley, Benton Harbor, Michigan. A method of destroying insects in a closed space such as a room comprises treating an approximately one per cent solution of the active principle of pyrethrum by steam atomization with steam of a mass from approximately one to six times that of the solution by directing a jet of said steam into said space and introducing said solution into said jet whereby the mixture is projected into and diffuses in said space.

1,928,256. Insecticide. Howard A. Jones, Cherrydale, Va. The Government and the People of the United States. A process of producing a liquid insecticide containing rotenone in a colloidal state of dispersion consists substantially in dissolving a plant extract containing rotenone in pyridine and adding this solution to water with subsequent mixing.

1,928,483. Disinfecting Device. John A. Gerome, Kitchener, Ontario, Canada. A device for use with water-closets and the like for automatically supplying a sufficient quantity of disinfecting material to the water prior to the time it is released for flushing the bowl is described.

1,928,864. Garbage Disinfecting Device. Najam Modad and Louis Schneider, Carbondale, Pa. A container for solid or liquid disinfectant is adapted to be attached to a garbage can.

BEST SUITED TO YOUR NEEDS

N E W P O R T

P I N E O I L S

GENERAL NAVAL STORES COMPANY, INC.

Address Main Office: 230 Park Avenue, New York City



Plants: De Quincy, La.; Pensacola, Fla.; Bay Minette, Ala.

1,928,968. Insecticide. Howard A. Jones, Cherrydale, Va. A process of producing a liquid insecticide containing rotenone in a colloidal state of dispersion consists in dissolving rotenone in acetone, and adding this solution to water in the presence of tannic acid with subsequent mixing.

1,930,474. Water-Soluble Disinfectants. Paul Gödrich, Munich, Germany. Goodrich Chemical Co., New York, N. Y. A process of making water-soluble disinfectants consists of dissolving in fatty oils, aromatic compounds, possessing inherent bactericidal properties, and which are soluble in such fatty oils, but insoluble, or but sparingly soluble, in water; adding concentrated sulphuric acid to such oil solution under conditions of reduced temperature, and permitting the action of the acid to continue until the solvent oil has become substantially sulphonated; and thereafter substantially removing the excess of acid by washing. For example, 100 grammes of chloro-thymol are heated with 100 grammes of olive oil until a smooth paste is obtained, then the mixture is cooled down to about 20° C. and 60 grammes of concentrated sulphuric acid are added the mixture being agitated and kept cool, so that the temperature does not exceed 45° C. The resulting solution is allowed to stand for 2 days and is then washed with a concentrated sulphate of soda solution.

1,931,662. Insect Exterminator. Peter Lambertus, Emmett H. Trimpe and Kenneth G. Kountz, Indianapolis, Ind., Acme Sales Corp., Indianapolis, Ind. The object of this invention is to provide a hand-portable device for producing a spray for the extermination of noxious insects and particularly such as infest hotels, apartments and other dwelling houses. A further object is to generate the steam by means of an electrode energized by current from the house service wires.

1,933,077. Method of Extraction. Nicholas A. Sankowsky, Elizabeth, N. J. Standard Oil Development Co., Delaware. A process of preparing strong solutions of pyrethrins, comprises placing pyrethrum flowers in a mass containing interstices, distributing a solvent for pyrethrins over the flowers at a rate less than sufficient to flood said interstices with solvent, whereby the solvent is caused to flow substantially only over the exterior surfaces and through the intercellular surfaces of the flowers, and withdrawing the pyrethrin-containing solution that has passed through the mass. The following example indicates the character of the solvent flow from another viewpoint. Extraction was carried out in a series of 12 superposed tanks each holding about 3.5 pounds of dried pyrethrum flowers. Kerosene was intermittently supplied to the first tank and was allowed to trickle through the series, as above described. The total weight of flowers extracted in a period of 33 days was 70 pounds. The extract obtained weighed about 0.7 pounds. The ratio of flowers to extract is accordingly 100 to 1 which is about as high as it is practical to go. The extract was approximately 1,035 times as strong, measured by its insecticidal value, as solutions prepared by former direct extraction methods without distillation.

1,933,757. Disinfectant. Hans Priewe, Berlin - Charlottenburg, Germany. Schering-Kahlbaum A. G., Berlin, Germany. A disinfectant consists of a mixture of the double compound of urea and m-cresol containing 1 mol urea and 1 mol m-cresol with a diluent (e.g., talc or boric acid).

1,934,057. Insecticide. Dudley H. Grant, Moorestown, N. J. Standard Oil Development Co., Delaware. An insecticide or insect repellent comprises a petroleum white oil, derris extract and an emulsifying agent. For example, two kilograms of ground derris roots were extracted with 4 litres of benzol. Distilling off the solvent in vacuo, 113 grams of dry extract were obtained, representing 5.65 per cent of the dry derris roots, and having the appearance of a reddish-brown resin. Eighty grams of this extract were fed into the colloid mill together with a solution of 750 grams of oil-soluble sodium sulfonate in

2.5 litres of "Wyrol", a commercial brand of white oil. Water was also added in the amount of 1.5 litres. A thick emulsion resulted similar in appearance to mayonnaise and ready for marketing. Part of this preparation was diluted with 50 times its weight of water and gave a final spray which was effective when sprayed on trees as an insecticide.

1,938,585. Disinfectant. William L. Estabrooke, Yonkers, N. Y. The patentee claims a disinfectant which is the reaction product of a thiourea and a salt of one of the following metals: mercury, lead, cadmium, zinc, silver and copper. This composition is adapted for the treatment of seeds and plants to disinfect and to kill disease organisms which infest the same.

1,938,652. Horticultural Spray. Amos E. Badertscher, Baltimore, Md. McCormick & Co., Inc., Baltimore, Md. A horticultural spray includes pine oil, dipentene in amount not less than about 25 per cent of the pine oil, pyrethrins, soap and water.

1,940,646. Insecticide. Dudley H. Grant, New York, N. Y. Standard Oil Development Co., Delaware. An insecticide contains from about 3 per cent to 40 per cent by weight of an oleoresin of pyrethrum and from about 97 per cent to 60 per cent by weight of an alkali metal sulfonate derived from petroleum.

1,940,899. Horticultural Dust. Amos E. Badertscher, Baltimore, Md. McCormick & Co., Inc., Baltimore, Md. A method of producing a horticultural dust includes spraying talc with the active principle of pyrethrum in solution in a volatile solvent while agitating the inert material and maintaining it at a temperature at which the solvent will evaporate.

1,941,055. Insecticide. Henry L. Renard, Basking Ridge, N. J. An insecticide comprises fumigating tobacco dust of approximately 1 per cent nicotine content and naphthalene in the form of finely divided particles of approximately thirty mesh, the said constituents being present in the proportion of approximately one part of tobacco dust to four parts of the naphthalene, the particles of naphthalene being impregnated with a portion of the nicotine content of said tobacco dust, and the particles of vegetable matter present in said tobacco dust having a portion of said naphthalene absorbed therein.

1,942,104. Process of Extracting Rotenone. Howard A. Jones, Washington, D. C. Government and People of the United States. A process for making a chemical compound of rotenone and carbon tetrachloride consists substantially in extracting the roots of plants of the genus *Deguelia* (*Derris*), *Lonchocarpus* or *Spatholobus* with warm carbon tetrachloride and crystallizing.

1,942,800. Sodium Para-Phenylphenate. Edgar C. Britton, Midland, Mich. The Dow Chemical Co., Midland, Mich. The patentee claims as a new compound sodium para-phenylphenate in the form of white needle-like crystals, containing one molecule of water of crystallization and decomposing at a temperature of about 105° C. Sodium para-phenylphenate is useful for the preparation of disinfecting agents, insecticides, soaps, etc.

1,945,235. Colorless Household Insecticide. Nicholas A. Sankowsky, Elizabeth and Dudley H. Grant, Moorestown, N. J. Stanco, Inc. A process of manufacturing pyrethrum insecticide comprises preparing a strong solution of pyrethrum extract in a light petroleum distillate, agitating the solution with anhydrous methyl alcohol to dissolve part of the pyrethrum extract in the alcohol, separating the alcohol layer from the light hydrocarbon layer, cooling the alcohol solution and removing the separated impurities, distilling off the alcohol to obtain as residue a purified extract containing the pyrethrins, and dissolving said purified extract in water white kerosene.

1,947,169. Insecticide. William K. Price, Selah, Wash. A method of repelling codling moths comprises spraying fruit trees and the like with a mixture containing naphthalene and emulsified oil, the mixture being applied in an atomized condition and at a pressure of not materially less than 250 lbs. per square inch. A suitable mixture

DEO-BASE

Reg. U. S. Pat. Off.

...“*free from kerosene odor...*”

Can you say this about your liquid insecticide? Or does it leave that repulsive odor of kerosene which so seriously interferes with sales?

Here is what Dr. Eric Kunz, managing director of Givaudan-Delawanna, Inc., recently wrote in an article on insecticide odors:

“The greatest step toward the modernization of fly sprays has been the adoption of a highly purified hydrocarbon distillate, free from kerosene odor, as a solvent and carrier for pyrethrum. Oils of this type, refined to a purity similar to that of white mineral oils, have all the desirable properties of kerosene, but lack its repulsive odor.”

DEO-BASE is the ideal base for liquid insecticides . . . complete freedom from kerosene odor . . . assures your finished product ready acceptance by housewives, hotels, bakeries, dairies, manufacturers of food products . . . wherever the tell-tale odor of kerosene sprays is found objectionable.

DEO-BASE specifications: Flash point: over 170° F.—initial boiling point: over 370° F.—end point: below 505° F.—color: water white—no Kerosene odor.

L. SONNEBORN SONS, Inc.

Refiners of White Oils and Petrolatums

New York Office
88 Lexington Avenue

Refineries { Petrolia, Pa.
Franklin, Pa.

Chicago Office
820 Tower Court

is 1 lb. naphthalene, 3 gals. emulsified oil and 300 gals. water.

1,952,166. Mercury Derivatives of Di-Phenyl Phenolphthalein. Sidney E. Harris, Brooklyn, N. Y. and Walter G. Christiansen, Bloomfield, N. J. E. R. Squibb & Sons, Brooklyn, N. Y. The patentees claim di-mercury derivatives of 3,3'-diphenyl-4,4'-phenolphthalein, said derivatives containing mercury in the position it occupies when a solution in an inert organic solvent of the compound from which the mercury derivative is formed is boiled with mercuric acetate and a small amount of glacial acetic acid. These are bactericidal agents.

1,952,977. Red Squill. Joseph B. Edmonds, Baltimore, Md. A rodent exterminator, includes extract of red squill, oil of anise and saccharin.

1,942,827. Tertiary Alkyl Substituted Orthodihydroxy Benzenes. Lindley E. Mills and Bruce L. Fayerweather, Midland, Mich. The Dow Chemical Co., Midland, Mich. The patentees claim 1:2-dihydroxy-4-tertiary-butyl benzene and 1:2-dihydroxy-4-tertiary-amyl benzene. These compounds may be employed as stabilizers for insecticide compositions, such as pyrethrum and rotenone. They may also be used as antioxidants in vegetable and animal fats, waxes, soaps, etc.

1,953,263. Mercury Compound of Nitro-Ortho-Cresols. George W. Raiziss, Philadelphia, Pa. Abbott Laboratories, North Chicago, Ill. These new compounds have been found to be especially effective as bactericidal and bacteriostatic agents, particularly in combating infectious diseases.

1,953,413. Germicidal Preparation. Emil Klarmann, Jersey City, N. J. Lehn & Fink, Inc., Bloomfield, N. J. A germicidal preparation comprises paratertiary amyl phenol, a cresol and a soluble soap in an aqueous vehicle.

1,953,629. Agents Killing Flies. Kaspar Pfaff and Michael Erlenbach, Frankfort-on-the-Main, Germany. Winthrop Chemical Co., Inc., New York, N. Y. An agent for killing flies comprises a mixture of 25 parts of benzoic acid benzyl ester and 75 parts of a petroleum distillate boiling between 200° C. and 260° C.

1,954,091. Treatment of Coal Tar Acids. Jacque C. Morrell, Chicago, Ill. Universal Oil Products Co., Chicago, Ill. A process of converting relatively high boiling coal tar acids separated from coal tar into lower boiling point products comprises heating the acids under super-atmospheric pressure and in the presence of water to a temperature ranging between 750° F. and 1,100° F. and condensing and collecting the evolved vapors. The products of relatively low boiling range are suitable for use as wood preservatives and animal dip.

1,954,517. Insecticide. Euclid W. Bousquet and Wendell H. Tisdale, Wilmington, Del. E. I. duPont deNemours & Co., Wilmington, Del. A contact insecticide comprises a water emulsion of b. b-dichloroethyl ether and an insecticide of the group consisting of water insoluble dithiocarbamates, water insoluble thiuram sulfides and the toxic ingredient of Derris root.

1,955,207. Mothproofing Agent. Hermann Stötter and Theodor Hermann, Leverkusen-I. G. Werk; Farbenindustrie A. G., Frankfort-on-the-Main, Germany. A textile pest-proofing composition comprises a mixture of an arylsulphonic acid amide of the general formula $RSO_2N(R_1)R_2$ wherein R stands for an aromatic nucleus and R₁ and R₂ stand for hydrogen or a radical selected from the group consisting of alkyl, aralkyl and aryl radicals, which may further contain a substituent selected from the group consisting of hydroxy, halogen, acyld and alkyl- or arylacetyl groups, but are free from free sulphonic and carboxylic acid groups, and a phosphoric acid ester of the general formula $R_1O(R_2O)R_3OPO$ wherein R₁, R₂ and R₃ mean similar or dissimilar radicals selected from the group consisting of alkyl, aralkyl and aryl radicals, which may further contain a substituent selected from the group consisting of halogen and alkoxy groups, said compositions being soluble in organic sol-

vents and generally representing colorless or faintly colored oils.

1,955,891. Method of Mothproofing. Paul L. Salzberg and Frederick M. Meigs, Wilmington, Del. E. I. duPont deNemours & Co., Wilmington, Del. A parasiticide comprises an organic fluorine compound selected from the class consisting of fluoronaphthalenes, fluorodiphenyls, fluoroanilides, fluorophenols, fluoroacetic acid and phenyl fluoroform.

1,956,728. Disinfecting Liquids. Otto Ornstein, Berlin-Lichterfelde-Ost, Germany. A. G. Chemischer Werte, Berlin, Germany. A disinfecting and sterilizing composition comprises a mixture of an aqueous solution of free sodium-oxyhydrate and of an aqueous solution of sodium-chloride, each one of said substances being present substantially to one-tenth to one-fifteenth normal, the said mixture possessing a pH-coefficient around substantially 13.07.

1,957,385. Deodorant. John S. Brogdon, Atlanta, Ga. Robert T. Jones, Jr., Atlanta, Ga. A deodorant for air in confined spaces comprises granular trisodium phosphate admixed with a comminuted solid (e.g. broken glass, charcoal or pebbles) to promote diffusion of air therethrough.

1,957,429. Insecticide. Elmer W. Adams, Hammond, Ind. Standard Oil Co., Chicago, Ill. An insecticide and insectifuge, comprises the oil-soluble extract from pyrethrum flowers and a small proportion of dibutyl phthalate dissolved in a mineral oil.

1,962,276. Moth-Protecting Media. Johann Huismann and Hugo Schweitzer, Wiesdorf-on-the-Rhine, Germany. I. G. Farbenindustrie, A. G., Frankfort-on-the-Main, Germany. The patentees claim as a moth-proofing agent, an aryl sulphonic acid amide of the general formula $RSO_2NR_1R_2$ wherein R stands for a benzene nucleus and R₁ stands for hydrogen or a substituent selected from the group consisting of alkyl, aryl and aralkyl, and R₂ means a substituent selected from the group consisting of alkyl, aryl and aralkyl, and wherein all nuclei may further be substituted by a substituent selected from the group consisting of hydroxy-, halogen-, alkyl-, aryl-, alkylacetyl-, amido-, arylacetyl amido-, sulphonic acid-, and carboxylic acid groups.

1,963,100. Lauryl Thiocyanate. Paul L. Salzberg and Euclid W. Bousquet, Wilmington, Del. The Grasselli Chemical Co., Cleveland, Ohio. The patentees claim lauryl thiocyanate which boils at about 154-156° C. under 2½ mm. pressure, which is substantially insoluble in water but soluble in ethyl alcohol and which is toxic against lower forms of life.

1,963,955. Insect Repellent. Clarence R. Cleveland, Chicago, Ill. Standard Oil Co., Chicago, Ill. An insect repellent comprises an aralkyl ester of salicylic acid. The following compounds are representative of those compounds which may be employed: benzyl salicylate, phenethyl salicylate, phenylpropyl salicylate, cinnamyl salicylate, hydrocinnamyl salicylate, methylbenzyl salicylate, hydrobenzyl salicylate, methyl ether of benzyl salicylate, ethyl ether of phenethyl salicylate, ethyl ether of benzyl salicylate, butyl ether of benzyl salicylate and other ethers boiling within the range of the above compounds may be used.

1,965,304. Stable Chlorine Containing Compounds. Howard Adler, Chicago Hts., Ill. Victor Chemical Works, Illinois. A method of producing a stable chlorine-containing compound comprises adding a concentrated solution of sodium hypochlorite to a molten mixture of trisodium phosphate and disodium phosphate having a Baume gravity of the order 56° at 100° C., and cooling and solidifying said mixture.

1,966,383. Chlorine Compositions. Harvey G. Elledge and Alfred Hirsch, Painesville, Ohio. Diamond Alkali Co., Pittsburgh, Pa. A method of making a dry, water-soluble composition of matter containing available

(Turn to Page 105)

BASIC PERFUME MATERIALS

We are offering a very complete and diversified line of Essential Oils and Aromatic Chemicals of particular interest to Soap Makers and Manufacturers of Paradichlorbenzene and Napthalene products. When in the market may we have the opportunity to submit prices and samples for comparison?

As representative of the well known house of Bertrand Freres, S/A of Grasse, France, we are in a position to offer oils such as Lavender, Geranium, Thyme, Rosemary, etc., of the highest quality at competitive prices.

SUPER SOLUBLE PERFUME BASES

Our laboratory has recently developed a line of concentrates which produce perfectly clear products when used in the proportion of one to two ounces per gallon of water. This new type of base is offered in a wide range of odors, each at \$1.50 per pound. A sample sufficient to prepare a trial gallon will be forwarded upon request.



P. R. DREYER INC.

12 East 12th Street

New York

"It's the Odor that Sells the Product"

CORRECTION IN INSECTICIDE TESTING

To correct an error which appeared in an article in the last issue of *Soap* under the title of "Evaluating Liquid Insecticides," the following communication has been received from F. C. Nelson of Stanco, Incorporated: "In reading through my paper in the October issue of *Soap*, I find that there has been a slight error made in the two tables. If you will refer to the article, you will see that a per cent sign has been included at the heading of both tables of Dead & Moribund flies. The first of these two tables represents dead and moribund flies in 24 hours, as given in the paper, and does not represent per cent dead, but rather the actual number of flies. The second column represents the actual percentage. Someone apparently decided that the per cent sign needed to go in both columns without referring to the paper. This will probably cause some misunderstanding by the readers and I would appreciate it if you would have a correction made in the next issue."

REVISE POLISH FREIGHT RATES

The Consolidated Freight Classification Committee, a joint committee of all United States railroad carriers, acted on a number of proposed changes in rates on polishes, waxes, etc., at its October meetings held at Atlanta, Oct. 10; New York, Oct. 16, and Chicago, Oct. 23. There are a number of more or less related items in the classification, polishes, polishing compounds, wax, etc., which the classification committee is desirous of consolidating into one item in the interests of simplicity and economy. So far as floor, furniture or vehicle polish or wax are concerned, the carload rating was to be reduced from 4th to 5th class in official and western classifications and from 4th to 6th class in southern classification. When packed in glass, they will continue to be rated 4th class. It is proposed to add bulk pails at 2nd class, the same rating assigned to boxed glass or boxed cans—one class higher than in bulk in barrels; and to increase from 2nd to 1st class "floor polish" packed in jacketed cans.

The Franklin Research Company, Philadelphia, manufacturer of "Rubber Gloss" floor wax, shoe wax, etc., has appointed Carter-Thomson Company, of that city, to handle its advertising account.

Miracul Wax Co., St. Louis, has reduced prices on "Dri-Brite" liquid floor wax—the quart price now being \$1.00 as against \$1.25 previously, and the pint price dropping from 75c. to 60c. Gallons drop from \$4.00 to \$3.00. A new half-gallon size has been introduced to sell at \$1.75.

Monsanto Chemical Co., St. Louis, recently mailed a revised edition of a booklet, "How Monsanto Serves," describing and picturing how chemicals enter into every phase of human life and activity.

DISINFECTANT SCRUB SOAPS

Cheap disinfectant soaps in England ordinarily consist of suitable tar acid derivatives emulsified in a solution of resin soap. Creosote, phenols, cresols and naphthalene are the usual disinfectant agents. The following directions are for the preparation of liquid disinfectant soaps suitable for scrubbing floors, etc.:

1. Ground resin	17 lbs.
Caustic soda, 30%	3 lbs.
Water	5 gal.
Crude creosol	3 gal.

Boil the caustic soda in 1 gallon of water and add the resin gradually to this. When dissolved and partly saponified, add 2 more gallons of water with continuous boiling and stirring. Add 2 gallons of creosol with stirring, then the remainder of the water and creosol. Keep covered until cold.

2. Water	6½ lbs.
Powdered resin	3¾ lbs.
Powdered soda ash	1 lb.
Powdered naphthalene	¾ lb.
Filtered creosote	½ lb.
Soft soap	¼ lb.

Dissolve the soda ash in water and heat to boiling. Add the resin and heat until saponified. Mix the soft soap and naphthalene separately and add the creosote to this. Add the mixture to the resin soap with continuous stirring. *Soap, Perfumery and Cosmetics Trade Rev.* 7, No. 9, 16 (1934).

Bristol-Myers Co. reports net earnings of \$552,012 for the third quarter, as compared with \$667,758 in the same period last year. For the first nine months of 1934 net earnings total \$1,574,060. The directors have declared the regular quarterly dividend of 50c. a share and an extra dividend of 10c. on the common stock, both payable Dec. 1 to holders of record Nov. 10.

Phillips & Benjamin, Boston, manufacturers of "Sterakleen," a new denture cleaner, have placed their advertising account with H. B. Humphrey Company, of that city.

Zirkel Exterminators, formerly at 1662 Putnam Ave., Brooklyn, have taken new quarters at 654 Seneca Ave., Brooklyn.

A. S. Boyle Co., Cincinnati, floor waxes, is putting up a new one-story addition to its plant, at an estimated cost of \$40,000.

Thoro Exterminating Co., New York, moves November 15 to 109 West 116th Street. In addition to its exterminating business the company will now carry a full line of sanitary products.

Scott Products Co., Philadelphia, janitor supplies, has recently moved to new quarters at 237 South 13th Street.

American Research Products, Inc., Chicago, moved, November 15, to 400 West Madison Street.



ACTION!

¶ The user of insecticides demands speed of action and certainty of kill. ¶ Both are important and both must be possessed by an insecticide to insure satisfaction. ¶ LETHANE 384 possesses both properties in outstanding degree. ¶ Of the two, however, the factor of speed makes the keenest impression upon the user. ¶ Before his very eyes he sees the insects fall, stunned and helpless. ¶ He has the evidence of his own senses that here is an unusually effective insecticide. ¶ If you are not already familiar with the rapidity with which insecticides made from LETHANE 384 bring down insect pests, it will pay you well to investigate the merits of this synthetic insecticide. ¶ We shall be glad to give you any further information regarding LETHANE 384 upon your request.

RÖHM & HAAS CO., INC.

222 West Washington Square

Philadelphia, Pa.

HARRY COLE SERIOUSLY ILL

Harry W. Cole, secretary of Baird & McGuire, Inc., Holbrook, Mass., a member of the Board of Governors and former secretary of the National Association of Insecticide & Disinfectant Manufacturers, and widely known in the industry, is seriously ill at his home in Quincy, Mass. He was confined to the hospital under observation for ten days, returning to his home last week where he is still confined to bed unable to see visitors, according to word from C. C. Baird, president of Baird & McGuire, Inc.

Thomas Sparks is now representing S. B. Penick & Co., New York, in the Philadelphia district. Mr. Sparks has been associated with the botanical drug industry for the past sixteen years, having begun his association in the business with McIlvaine Brothers, Philadelphia.

Dr. F. W. Brown, formerly with Magnus, Mabee & Reynard, Inc., New York, has joined D. W. Hutchinson & Co., New York, essential oils, as chief chemist. A. B. Foster, formerly in charge of M M & R sales in Rochester, has also joined Hutchinson as sales manager.

W. H. Adkins has resigned his position as head of the purchasing department of Givaudan-Delawanna, Inc., New York, essential oils and aromatics, after having been associated with the firm for ten years.

Beach-Russ Co., 50 Church St., New York, manufacturers of pumps of various types, has issued a new folder describing their types of rotary liquid pumps for liquids, semi-liquids and pastes. Copies are available to interested manufacturers.

A. B. Foster, who since 1916 has represented Magnus, Mabee & Reynard, Inc., New York, in the Rochester territory, has resigned this position. Mr. Foster was secretary to the late P. C. Magnus, Sr., founder of the firm in 1906, and later served for a time as vice-president of the company.

Gebrueder Broemme, Berlin & Rifa, Soc. Am., Zurich, Switzerland, manufacturers of aromatic chemicals, have appointed Karl Kalmbach, 2834 Mildred Ave., Chicago, as their U. S. selling agent. This appointment followed completion of a six months' introductory campaign in the Chicago territory. Stocks are being carried in Chicago and New York.

NOW! In Color... PORCELAIN ENAMEL

GREEN
ROSE
ORCHID

FAWN
WHITE
BLACK



free! For a Limited Time A New Deal That Brings You Profit

Not only the ultimate in beauty—but the very essence of high, lasting quality are embodied in these fine deodorant Bloc Containers—now offered FREE with each set of 4-40 oz., or 6-25 oz., or 8-16 oz. KAPORATOR BLOCS.

NOTE THESE FEATURES

New Pastel Shades—green, rose, orchid, fawn, white, black—colors to harmonize with lavatory fixtures and walls. Glossy finish that's easy to keep clean. Positively rust-proof.

A New Idea for Your Trade

This combination of a beautiful container and the fragrant KAPORATOR BLOCS insures quick sales for you and satisfaction for your customers. So take advantage of this unusual FREE DEAL while the offer lasts.

KAPORATORS cost no more than ordinary blocs—yet the aroma lasts longer. Put up under your label if desired.

ORDER NOW Immediate Delivery

HYSAN PRODUCTS COMPANY

MANUFACTURING CHEMISTS



2560 W. ARMITAGE AV.

CHICAGO, ILL.

PARADOW

PURE PARADICHLORBENZENE

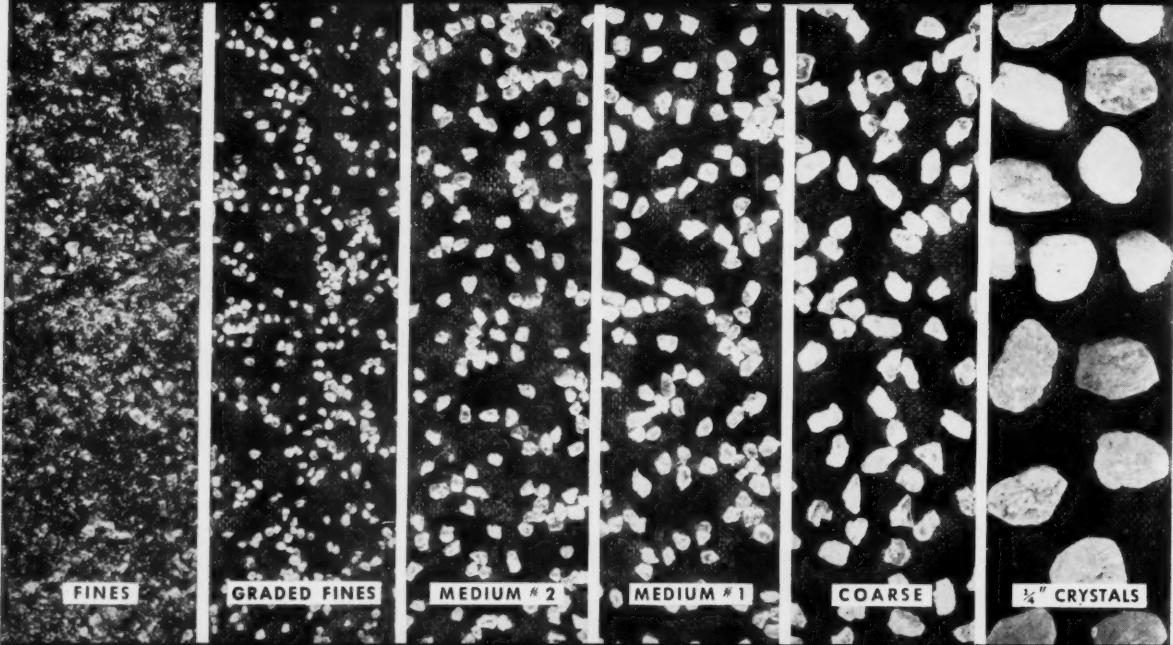


Six sizes of crystals, snow-white, pure and transparent, all uniform in size, will make it possible for you to select the size and form of Paradichlorbenzene that fits your requirement. Each form of crystal is designed to meet specific trade needs, whether it is to be processed or repackaged in its original form and sold as a moth killer, a deodorant, or for other purposes.

We offer the six sizes: $\frac{1}{4}$ " crystal, Coarse, Medium No. 1, Medium No. 2, Graded Fines, and Fines, and in addition are in position to produce special size crystals if desired. All sizes possess marked free-flowing properties.

We invite your inquiry. Let us quote on your requirements of Paradow, Pure Paradichlorbenzene of highest grade.

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN



OTHER DOW PRODUCTS

COUMARIN • METHYL SALICYLATE • METHYL ANTHONILATE • PHENOL
DOWICIDES (Disinfectants) • CAUSTIC SODA • CARBON TETRACHLORIDE
ETHYLENE DICHLORIDE • PROPYLENE DICHLORIDE
ORTHODICHLORBENZENE and over 200 others



F. A. Mayer, president of the Goodrich-Gamble Co., St. Paul, on a recent visit to New York stated that his company was enlarging its present plant to double production capacity. He states that sales of household and industrial insecticides in 1934 were materially ahead of last year. The company manufactures Mistox and bulk insecticides for hotels, factories, etc., as well as a line of toilet goods and pharmaceuticals.

St. Albans Pharmacal Co., New York, is introducing a new product, "Sulferan" kennel and flea soap, which is offered to druggists on the basis of twelve three-cake packages for \$1.50. Another medicated sulfur soap for human use is sold under the brand, "Sulferol."

RINSO PATENT CASE

(From Page 32)

produce a desired result, Lammont produced it by controlling those variables as outlined in his patent.

"We claim that Lammont discovered the process of taking neat kettle soap, bringing it to the proper temperature, and spraying it into the drying tower under proper conditions to produce a puffed-out, highly soluble, free-from-dust, free-flowing product; that it had not been done before, and that by similar control of the variables, it has been consistently done since."

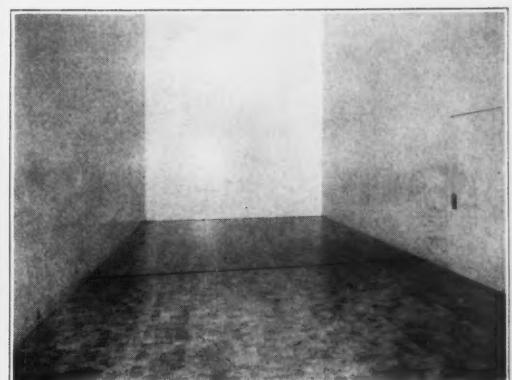
The trial involved several rather unusual occurrences, with Judge Slick finding it advisable to visit the Lever factory at Hammond to see "Rinso" made and also studying dozens of soap samples with the aid of a microscope in the court room. Of "Rinso" itself, Mr. Hoguet, the defense chief, said, "Rinso is not the characteristically puffed product that is claimed under the Lammont patent. It contains a few hollow particles, but it is not puffed at all in the sense that the Lammont product is puffed. He patented a definitely characterized product. Ours is not that at all.

"Rinso is aerated, from the admixture of air in the crutching process of mixing; it is not blown up by the expansion of steam within the particle in the drying tower.

"We contend that by our process of making 'Rinso' air is beaten into the soap by the crutcher, and in the elevation to the booster tank; that the quantity of air thus incorporated is very considerable; that the temperature of the soap sprayed into the tower, and the temperature and volume of air in the tower, is so far below the claims made in the Lammont patent, that the production of steam within the soap particle would be impossible.

"We do have particles in 'Rinso' with aircells, and there are some round particles, but the number of these is insignificant, and not enough to characterize it as a product similar to that claimed under the Lammont patent."

Following the conclusion of the case, it is expected that several months may elapse before a decision can be expected.



No Rubber Burns After Two Years on This Hand-Ball Court

Proof of the Durability of Federal No - Burn Gym Finish

For two years quick starts, skids and sudden stops have failed to leave any ugly black rubber burns on this hand ball court (name and location on request) protected with Federal No-Burn Gym Finish. Convincing proof that Federal Specialized Floor Products are outstanding for durability.

No-Burn Gym Finish is just one item in the complete Federal line of floor preservatives and polishes. Our entire technical staff works exclusively on these types of finishes. Therefore, we are the only manufacturers able to offer you a complete line of specialized products for every kind and type of floor.

YOUR MARKET IS READY MADE

You sell your present customers soaps and cleaners to use on surfaces that will have to be finished or polished after cleaning. With the Federal line you make your service complete and reach a big volume business that now goes elsewhere.

The success of Federal Distributors is proof of the effectiveness of our sales and merchandising policies.

Let us tell you how to reach this vast market successfully with proven products and efficient co-operation.

FEDERAL VARNISH CO.

337 So. Peoria St.

Chicago, Ill.

**WHY YOU CAN BE SURE
with
COAL TAR PRODUCTS
FROM KOPPERS**

**1. KOPPERS IS ONE OF THE TWO LARGEST
PRODUCERS OF COAL IN THE UNITED STATES**

This has given Koppers a thorough knowledge of the coals from which tar products are produced.

**2. KOPPERS BUILT OVER 75% OF ALL THE
BY-PRODUCT OVENS IN THE UNITED STATES**

This has made Koppers more familiar than any other organization with the processes of tar production.

**3. KOPPERS IS ONE OF THE THREE LARGEST PRO-
DUCERS OF CRUDE TAR IN THE UNITED STATES**

This has kept it in intimate daily contact with the practical side of the production of coal tars and their products.

DEPEND ON
KOPPERS
FOR COAL TAR
PRODUCTS

TAR ACIDS

CRESOL, U.S.P.

PHENOLS

CRESYLIC ACID

98% to 100% STRAW COLOR

TAR ACID OILS

NEUTRAL HYDROCARBON OIL

KOPPERS PRODUCTS COMPANY

KOPPERS BUILDING
PITTSBURGH, PA.

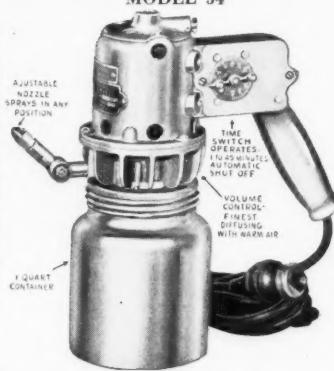
**The Answer to Your
SPRAYING PROBLEMS**

AUTOMATIC — SAFE — TROUBLE FREE
FINEST CONTROLLED ATOMIZATION
WITH THE NEW

TORNADO ELECTRIC SPRAYER

MODEL 54

Here is the new sprayer you've been looking for. It features an automatic time switch set at any point from 1 to 45 minutes — sprays desired amount without any attention whatever — automatically shuts off. Can also be used for hand spraying. Adjustable nozzle can be set for spraying in any position. Also exclusive volume control adjustment permits spraying one ounce every two to four minutes with either fine or heavy spray. Don't fail to get the facts on this new type sprayer before buying.



*Also Most Complete Line of Electric Sprayers to
Enable You to Meet Every Spraying Problem*



Model 53 new Compressor Type unit with new adjustable volume control. Will break insecticide into finest mist and gas formation mechanically obtainable. Floats throughout spraying area for many minutes — truly de luxe model! $\frac{1}{8}$ H.P. G.E. Universal Motor. 1 quart metal container, 20' of rubber covered cable.



Model 50 Fan Type unit. A fine insecticide atomizer. Sprays distance of 8' to 10'. $\frac{1}{8}$ H.P. G.E. Universal Motor, 1 pint glass jar, 20' of rubber covered cable.



Model 6 Fan Type unit. Will break insecticide into a very fine mist. Sprays 18' to 20'. $\frac{1}{3}$ H.P. G.E. Universal Motor. Norma Ball Bearings, 1 gallon metal container. This model is for larger institutions, warehouses, industrials, etc., and is also highly recommended for moth-proofing solutions. Write today for complete description and circulars.

BREUER ELECTRIC MFG. CO.

862 Blackhawk Street

Chicago, Ill.

We do not sell insecticides. Our business is manufacturing sprayers.

SOAP MANUFACTURE IN 1870

(From Page 53)

it to the bottom, but has to gather into streaks and veins throughout its substance, the purer and whiter soap doing the same. If the coloring matter thus supplied is not sufficient, a proper quantity of oxide of iron is added. This mottled soap is a harder and better article than the resin soap, and dissolves more slowly in water. Again, the firm makes a soap with cocoa oil, which is hard, light, and will wash with salt water. This is well known as "salt-water soap," or "marine soap." It is unnecessary to enumerate further.

MANY different materials are used in making soaps, and many modifications of the process above described are employed—some cold, some hot, some under pressure, etc.; but they all come under the one brief statement of a chemical union of caustic alkali with the acid part of a fat or oil. Tallow, suet, butter, spermaceti, whale oil, fish oil, goose-grease, horse-fat, and many more, have all been used. Even human fat has been made into soap, which, Professor Dussaute says, "dries quickly, and turns yellow." An equal or greater number of vegetable oils have been tried, including olive oil, linseed oil, nut oil, poppy-seed oil, castor oil, sunflower-seed oil, cotton-seed oil, cocoa and palm oils, etc., and quite a number of these different fats and oils have not only been manufactured experimentally, but are regularly used in the business. Even turpentine, wax, and resin, with alkalies, will form soaps, though not very good ones. Among the numerous improvements that have been devised in soap-making have been a number of plans for making soaps from petroleum. The blunder of expecting a soap from petroleum because it is greasy is a good deal like expecting that alcohol will put out a fire because it is a fluid. That which combines with the alkali must be an acid; to be such an acid, it must have oxygen in it. Now there is no oxygen in petroleum, and therefore it has not in it what can make soap.

The variety of alkalies available for soap-making is not so great as that of oils, and it can hardly be said that any besides soda and potash are commercially used in the business. There exists a process for using, instead of soda, an "aluminate of soda," consisting of nearly equal quantities of alumina and soda, which is claimed to give a soap of much greater cleansing power than soda alone. Ammonia has been employed as the alkali of a soap for medical use. Lime or baryta, being alkaline earths, will make soap. Some metallic oxides will do so; and a soap made by boiling olive oil with oxide of lead is known as "lead soap," and is used in medicine, as is a so-called "arsenical soap."

A certain number of other matters are used like the alumina just mentioned as *third ingredients* in soap, besides coloring matters and scents. Adulterations of many kinds have been practiced, not merely by mixing cheap oils with costly ones, and the like, but by adding



for Immediate and Economic Service to the SOAP AND DISINFECTANT INDUSTRY

The advantageous locations
of the 12 Reilly Plants
permit of excellent service
on a wide range of coal
tar products including—

CRESYLIC ACID
CRESOL
CRESOL U.S.P.
XYLENOL
TAR ACID OILS
NAPHTHALENE



REILLY
TAR & CHEMICAL CORPORATION

MERCHANTS BANK BUILDING • • • INDIANAPOLIS, IND.

SEATTLE, WASH. • PROVO, UTAH • MINNEAPOLIS, MINN. • CHICAGO, ILL. •

GRANITE CITY, ILL. • INDIANAPOLIS, IND. • DOVER, OHIO • FAIRMONT, W. VA.

• NEWARK, N.J. • NORFOLK, VA. • CHATTANOOGA, TENN. • MOBILE, ALA.



THAT GOOD OLD FASHIONED QUALITY and SATISFACTION BEHIND EACH PRODUCT!

SEND FOR OUR
DESCRIPTIVE FOLDER

DISINFECTANTS
INSECTICIDES
SANITARY SPECIALTIES
CLEANING COMPOUNDS
ETC.



THE CHEMICAL SUPPLY COMPANY
2450 CANAL ROAD
CLEVELAND, OHIO
"Since 1898"



DOBBINS *high pressure* CHEMICAL SPRAYERS



No. 35—3 qt. Capacity
No. 30—1½ gal. Capacity

We also manufacture other
Sprayers,
Sanitary Chemical Closets,
Mop Wringers,
and other metal specialties.

Controlled Atomization!

IT DOESN'T PAY TO TRUST TO LUCK.

If your product requires a sprayer for dispensing or application, the selection of the sprayer is of utmost importance to you.

Your success or failure in business depends largely on the effectiveness of your product. PROPER ATOMIZATION is most essential to the effectiveness of Insecticides, Disinfectants, and Germicides.

CONTROLLED ATOMIZATION, through air regulator, is an exclusive patented feature of Dobbins high pressure Chemical Sprayers.

THE NOZZLE has a wide range of adjustment, from a forceful, penetrating spray, to a medium mist, or a fine floating fog, with in between variations by a slight turn of the air control valve.

DOBBINS Sprayers will solve your spray problems.



No. 10—1½ gal. Capacity.
A New Chemical Sprayer
with Air Regulator and
Volume Control

DOBBINS MANUFACTURING COMPANY
NORTH ST. PAUL
MINNESOTA

PORLAND
OREGON

Write for complete catalog and price list.

mashed potatoes, or starch, or fine clay, or marble dust, or sulphate of baryta, to tallow, or to the soap itself.

Several materials have, however, been avowedly and openly mixed with soaps as improvements. The use of resin has been described. Silex, either as sand or in the form of "water-glass," or soluble glass (silicate of soda), is one of the most common; and some of the soaps made in this way are extremely efficient and useful. Modified soaps for various special purposes are made by mixing lime water, dissolved alum, etc., with soap already made.

One of the best known of all these modifications of soap is that known as "Sapolio," invented and introduced by the firm of Enoch Morgan's Sons, already referred to. This is a refined hard white soap, with which, at a certain stage in the process, a very finely divided powder is incorporated, the result being a material possessed of an extraordinary union of chemical and mechanical cleansing powers. It is intended not so much for purifying cloths as for cleaning paint, wood-work, brass, copper, windows, statuary, machinery, oil-cloth, polishing bright surfaces, etc., and its nature is such as to require a particular mode of application; but if the printed directions are complied with it has extraordinary efficacy. It has, however, been used with much success for removing grease-spots from clothes, etc.—a quality which was brought before the public once, and discovered twice, by a sort of accident. When the Sapolio was first introduced, and all the force of the house of Enoch Morgan's Sons had their hands and heads full to overflowing with making it and talking of its virtues, one of their employees, on going home one evening, found his wife at her wits'-end over a desperate grease-spot on the clothes of her son. "Pshaw!" exclaimed the father, half vexed and half joking, and recurring to what had been praised in his hearing all day as equal to almost everything, from purifying an evil conscience down to scouring paint.—"pshaw! Try Sapolio!" The mother promptly did so, and the Sapolio promptly took out the grease. This was reported at headquarters next day, but not much notice was taken of it until, at a subsequent period, Rev. Henry Ward Beecher published in his newspaper a strongly worded commendation of the Sapolio for the very same good quality, which, it seems, he had discovered very much in the same way. "You might go and ask Beecher for a recommendation till the day of judgment, you know, and not get it," observed the gentleman who told this story; "and so we think that recommendation means something."

Like many of the soundest firms in New York, the house of Enoch Morgan's Sons has quite a history. It was founded by the maternal grandfather of the present partners, Mr. D. R. Williams, about sixty years ago, at the same site now occupied by their downtown store, No. 211 Washington Street. The business has thus descended directly and prosperously to the third generation of hereditary owners, and seems likely to stand

Barrett Standard CHEMICALS

Barrett Standard Chemicals are produced to strict specifications under rigid scientific control. The result is uniformly dependable, high-quality products.

A competent Barrett Technical Staff will gladly assist you in production problems involving the use of Barrett Standard Chemicals. Phone, wire or write.

BARRETT STANDARD CHEMICALS

PHENOL (Natural)
U. S. P. 39.5° M. Pt. and 40° M. Pt.
Technical 39° M. Pt.
Technical 82-84% and 90-92%

CRESOL
U. S. P., Meta Para, Ortho, Special Fractions.

CRESYLIC ACID
99% Straw Color and 95% Dark.

XYLENOLS

TAR ACID OILS

NAPHTHALENE
Crude, Refined Chipped, Flake and Ball.

PYRIDINE

Refined, Denaturing and Commercial.

**HYDROCARBON OIL . . . BENZOL . . .
TOLUOL . . . XYLOL . . . SOLVENT
NAPHTHA . . . HI-FLASH NAPHTHA**



THE BARRETT COMPANY
40 RECTOR ST.
NEW YORK, N. Y.

Without Cost To You...

We would like to study your perfume oil problems—with one definite idea in mind, namely

TO SAVE YOU MONEY

Our 40 years of uninterrupted progress has enabled us to perfect scientifically manufactured perfume oils, at a moderate cost, with pleasing odors—(different from the old standard odors)—that are always acceptable to consumers of soap, insecticides, repellents, etc.

We have dedicated our laboratory and cost departments to the task of finding the lowest priced perfume oils without the sacrifice of quality and uniformity.

Our system of rigid testing for prime condition and freedom from deterioration has developed a uniformity that assures our customers of uniform finished products.

A few of our leading Specialties

ESSENTIAL OILS

Sandalwood E. I.	Bergamot Italian
Patchouly Select	Cedar Leaf
Lavender Flowers	Cedar Wood, etc.

PERFUME OILS

Bouquet D'Cologne	Kerospray Bouquet No. 805
B. L. S. Bouquet	Kerospray Bouquet No. 806
M. S. B. Bouquet	New Mown Hay Bouquet EAM.
Bouquet No. 32	No. 4
Bufra Bouquet	Odorit Bouquet
Kerospray Bouquet No. 801	Sensation Bouquet
Kerospray Bouquet No. 802	Trona Bouquet
Kerospray Bouquet No. 803	Bouquet Fleur EAM. No. 3
Kerospray Bouquet No. 804	L. V. Bouquet
"It" Bouquet	

THANKSGIVING

We hope you are as thankful as we are. It is our sincere desire to always furnish quality ingredients that will help develop your business—for as your business develops, we know ours will.

We are thankful for your patronage.

MAGNUS MABEE & REYNARD, INC.
Essential Oils

32 CLIFF STREET

NEW YORK

Sherwood's SPRAYSENE

takes the place of kerosene in percolating pyrethrum flowers or diluting pyrethrum concentrates. It has

NO KEROSENE ODOR

Conforms with the National Association of Insecticide & Disinfectant Manufacturers' specifications for Peet-Grady test distillate.

THE TEST TELLS:

A. P. I. Gravity at 60° F.....	50.0
Specific Gravity at 60° F.....	0.7796
Saybolt Viscosity at 100° F.....	33
Saybolt Color	30 plus
Odor	Free from Kerosene
Initial Boiling Point.....	380° F.
End Point	510° F.
Flash Point	175° F.
Fire Test	180° F.
Copper Test	Negative
Acid Test	Negative

Refined by

SHERWOOD
PETROLEUM COMPANY, INC.

Brooklyn, N. Y., Warren, Pa., Chicago, Ill.

Branches or agents in principal cities

— • —

Also manufacturers of

D I - B U G
PYRETHRUM EXTRACTS
AND POWDER

as much longer. In the days of its origin soap and candles were commonly manufactured at the same establishment, the fats used being applicable for either purpose. The making of candles was kept up until some ten or fifteen years ago, when the use of those ancient artificial lights had become so diminished, in consequence of the introduction of gas, burning fluid, kerosene, etc., that it was given up, and the only work done at present by the firm besides soap-making is the preparation by wholesale of a few chemicals, where the processes can be so carried on as to combine economically with the soap processes.

NEW INSECTICIDE PATENTS

(From Page 93)

chlorine comprises heating a solution of sodium metasilicate to about 50° C., mixing therewith a solution of sodium hypochlorite, the proportions being adapted to provide a solution corresponding to the monohydrate of sodium metasilicate, and congealing the entire solution to form a crystallized homogeneous solid mass of said hypochlorite distributed throughout hydrated sodium silicate which is of substantial stability, dry to the touch, and readily and substantially completely soluble in water.

1,967,024. Insecticide. Stewart C. Fulton, Elizabeth, N. J. Stanco, Inc. A substantially anhydrous household insecticide comprises pyrethrins, rotenone and a mixed solvent. A suitable insecticide is made by dissolving 0.025 per cent by weight of rotenone in a 1:8 pyrethrum-kerosene extract.

1,967,372. Organic Mercury Compounds as Disinfectants. Fritz Schönhöfer, Elberfeld and Wilhelm Bonrath, Leverkusen-on-the-Rhine, Germany. Winthrop Chemical Co., Inc., New York, N. Y. A process for protecting organic materials liable to attack by plant pests and micro-organisms comprises treating the said materials with a dispersion essentially comprising a mercury compound corresponding to the general formula AcHgCHRCHRO_2 , in which "Ac" denotes hydroxyl or any radical of an acid capable of forming a salt with mercury, "R" signifies hydrogen, alkyl, aralkyl or aryl and "R'" alkyl, aralkyl, aryl or the radical $\text{AcHgCHR-CHR}'$.

1,967,825. Bactericidal Compound. Emil Klarmann, Jersey City, and Louis W. Gatyas, Bloomfield, N. J. Lehn & Fink, Inc., Bloomfield, N. J. Claim is made for 3-chloro-4-hydroxydiphenylmethane, 5-chloro-2-hydroxydiphenylmethane and 4'-chloro-4-hydroxydiphenylmethane.

1,968,136. Disinfecting. Henry A. Gardner, Washington, D. C. A solid insecticide and disinfectant comprises rubber carrying orthodichlorobenzene in solid solution in the rubber substance.

1,969,491. Insecticide. Elmer W. Adams, Hammond, Ind. Standard Oil Co., Whiting, Ind. A composition capable of forming a stable emulsion with water and effective as an antiparasitic spray for plants and trees, comprises the following: preferentially oil-soluble mineral oil sulphonates (5 per cent oil), 14.5 per cent; soda resin soap, 2.8 per cent; water, 1.4 per cent; alcohol, 1.0 per cent; straw oil, 79.8 per cent; and creosote, 0.5 per cent.

1,969,801. Hydrocarbon Substituted Bromophenol. Emil Klarmann, Jersey City, N. J. Lehn & Fink, Inc., Bloomfield, N. J. Claim is made for 4-tertiary amyl-2-bromophenol, 2-n-hexyl-4-bromophenol and 4-n-propyl-3, 5-dimethyl-2-bromophenol. These are highly effective against *Staphylococcus aureus*.

A moth-destroying compound consists of a product made by condensing an isatin sulfonic acid with a phenolic body substituted in the nucleus by at least one halogen. F. R. Geigy S. A. Canadian Patent No. 345,058.

SPRAY ELECTRICALLY



with the

HUDSON No. 305

HERE is a high quality, moderately priced machine for correct application of commercial insecticides and disinfectants. Each component part, from compressor to spray head, is engineered to give efficient performance and lasting service. Since its recent introduction to the trade, enough favorable comment has resulted to assure us that the No. 305 fills a real need in the industry.

Write for complete information, or ask to have our representative demonstrate it.

**H. D. HUDSON MFG. CO.
589 E. ILLINOIS ST., CHICAGO**

INSECTICIDES

Without proper fragrance, insecticides and fly sprays will not appeal to the purchaser.
Why not let him determine the sales value of your merchandise.

WE WILL ASSUME

part of your introductory cost by offering you for a limited time concentrated perfume odors for your products at a below cost figure.

Consider Our Laboratory Part of Your Organization

KEROL No. 1

A concentrated oil which will produce surprising results at a low cost.

Introductory price 45c lb.
Regular price 60c lb.

KERADOR No. 534

An especially pleasing fragrance having a concentrated strength which satisfactorily masks the odor of kerosene.

Introductory price 50c lb.
Regular price 85c lb.

BUDD AROMATIC CHEMICAL CO., Inc.

Essential Oils

PERFUME SPECIALTIES

Aromatic Chemicals

667 WASHINGTON ST., NEW YORK, N. Y.

U. S. Representatives
N. V. POLAK & SCHWARZ
Essencefabriken.

TESTS BEST WHY?

Because Oakland is close commercially and geographically to Japan.

Because the AN-FO Mfg. Co. has intimate buying relations with Japanese producers, insuring choice pyrethrum flowers.

Because extracting and concentration are done by the Isolation Process, which uses only cold hydrocarbon distillates throughout.

Because this process brings forward into the extract the natural color and odor as well as the killing principles of the fresh dried flowers.



NO. 20

PYRETHRUM
EXTRACT
KILL, COLOR, ODOR

AN-FO MFG. COMPANY, OAKLAND, CALIF.



Deodorizing

AND MOTHPROOFING

Blocks

PLAIN AND PERFUMED
MADE WITH NAPHTHALENE OR PARA BASE

NAPHTHALENE FLAKES, CHIPS, etc.

DISINFECTANTS EMULSION AND SOLUBLE TYPES

FLY SPRAYS HOUSEHOLD SPRAYS
CATTLE SPRAYS



THE WHITE TAR COMPANY

OF NEW JERSEY, INC.
PHONE KEARNY 2-3600
BELLEVILLE PIKE

KEARNY, N. J.

TERMITES AND THEIR CONTROL

(From Page 87)

one would mortar, using about one gallon of the liquid for every ten lineal feet of the trench. This saturated earth is replaced in the trench and then should once again be drenched with the insecticide, using this about one gallon for every twenty-five lineal feet of the trench. A similar trench of treated earth should be made around every pillar, etc., which comes in contact with the ground.

Here it should be emphasized that in order to be of any value against termites it is absolutely necessary that this barrier of treated earth be impenetrable. It can be made so only by thoroughly mixing the earth with a permanent, highly penetrating toxic material. A simple spraying around the foundation is inadequate, only a thorough drenching will suffice. The ground underneath the house should be well drenched with creosote. About six gallons for every one hundred square feet will be sufficient. After constructing a suitable barrier around the foundation of the house it is necessary to make sure that the termites cannot enter through the foundation itself. Therefore, carefully fill all cracks and crevices in the concrete foundations, walls, floors, etc. Coal tar pitch is ideal for this purpose.

IV.—*Treatment of the Wood.* Termites attack the wood in the house. This should always be kept in mind when protecting a house against these insects. To insure against termite damage it is necessary to immunize the wood against them. As in the treatment of the ground, so also in the treatment of the wood, thoroughness is of utmost importance.

A mere spraying of the lumber is insufficient. The preservative should be forced into the wood under pressure. We recommend that holes one-fourth inch in diameter be drilled across the grain of the wood, into these holes specially made plugs are screwed, and the preservative pumped through these plugs into the wood. After all the wood has been pressure treated, it is recommended that the job be completed by thoroughly spraying all the wood in the substructure of the house.

— ♦ —

A number of leading German chemical concerns specialize in moth preventives, but the I. G. Farbenindustrie has probably given the greatest attention to developing trade in this field. The Farbenindustrie's trade in moth repellants has proved so successful that a new division has been established for handling this type of business separately from general insecticides, with which it was formerly grouped, and it is reported that the new division has become self-supporting. A considerable expansion of export sales is said to have occurred in recent months, especially in Japan, as a result of the policy of the military authorities in favoring greater use of moth preventives on woolen goods and furs. In Germany application of mothproof preparations is being urged as part of the active national campaign now being waged for the preservation of materials and utmost economy in their use.

UNIFORMITY

ATLANTIC ULTRASENE

and it

leaves no oily
residue and no
kerosene odor

Atlantic Ultrasene has a carefully chosen, close-cut distillation range that makes it uniform without impairing its effectiveness as an insecticide base. It leaves no oily residue, and there is no residual kerosene odor. An ultra-refined, colorless petroleum product, Ultrasene is an ideal carrier for efficient, *salable* fly-sprays.

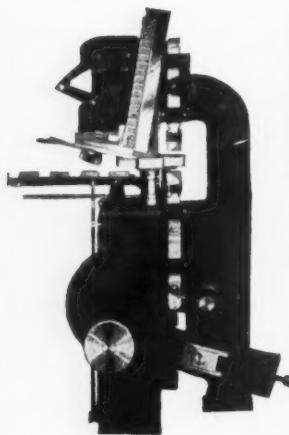
Further information and a working sample will be gladly furnished upon request. The Atlantic Refining Company, Specialty Sales Department, 260 South Broad Street, Philadelphia, Pa.

ATLANTIC ULTRASENE

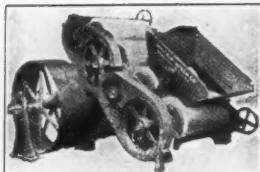
Special Offerings of

SOAP MACHINERY

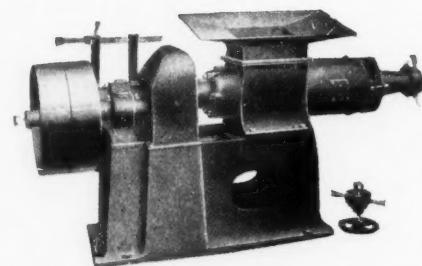
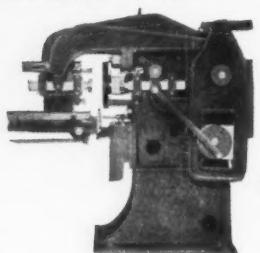
Completely Rebuilt!



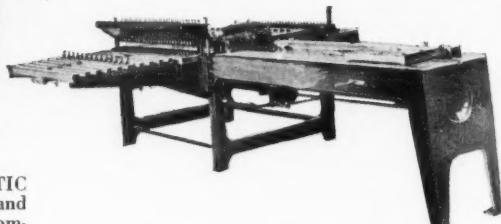
Small size fully automatic Jones toilet soap press. Capacity 150 to 200 small cakes per minute. A real buy at an attractively low price. Has been completely rebuilt in our own shops.



H-A SOAP MILL
This 4-roll granite toilet soap mill is in A-1 shape. Latest and largest size rolls.



Single screw soap plodders with 6, 8, 10 or 12 inch screws. All completely rebuilt and unconditionally guaranteed.



2 Automatic Power Soap Cutting Tables

NEW CRUTCHERS!



This Newman brand new, all steel steam jacketed soap crutcher. Will crutch any kind of soap. We also build another crutcher especially adapted for laundry soap in addition to other new soap machinery such as frames, cutting tables, etc. Send for complete list.

All used equipment rebuilt in our own shops and guaranteed first class condition.

Send us a list of your surplus equipment—we buy separate units or complete plants.

ADDITIONAL USED SOAP MACHINERY

H-A 1500, 3000, 4000, 5000 lbs. capacity. Steam Jacketed Crutchers, Dopp Steam Jacketed Crutchers, 1000, 1200, 1500 lbs. and 800 gals. capacity.

Ralston Automatic Soap Presses. Scouring Soap Presses. Empire State, Dopp & Crosby Foot Presses. 2, 3, 4, 5 and 6 roll Granite Toilet Soap Mills.

H-A 4 and 5 roll Steel Mills. H-A Automatic and Hand-Power slabbers.

Proctor & Schwartz Bar Soap Dryers. Blanchard No. 10-A and No. 14 Soap Powder Mills.

J. H. Day Jaw Soap Crusher. H-A 6, 8 and 10 inch Single Screw Plodders.

Allbright-Nell 10 inch Plodders.

Filling and Weighing Machines for Flakes, Powders, etc.

Steel Soap frames, all sizes.

Steam Jacketed Soap Remelters.

Automatic Soap Wrapping Machines.

Glycerin Evaporators, Pumps.

Sperry Cast Iron Square Filter Presses, 10, 12, 18, 24, 30 and 36 inch.

Perrin 18 inch Filter Press with Jacketed Plates.

Gedge-Gray Mixers, 25 to 6000 lbs. capacity, with and without Sifter Tops.

Day Grinding and Sifting Machinery. Schultz-O'Neill Mills.

Day Pony Mixers.

Gardiner Sifter and Mixer.

Proctor & Schwartz large roll Soap Chip Dryers complete.

Doll Steam Jacketed Soap Crutchers, 1000, 1200 and 1350 lbs. capacity.

Day Talcum Powder Mixers.

All types and sizes—Tanks and Kettles.

Ralston and H-A Automatic Cutting Tables.

Soap Dies for Foot and Automatic Presses.

Broughton Soap Powder Mixers.

Williams Crutcher and Pulverizer.

National Filling and Weighing Machines.

NEWMAN TALLOW & SOAP MACHINERY COMPANY 1051 W. 35th ST.
CHICAGO

Our Forty Years Soap Experience Can Help Solve Your Problems

Say you saw it in SOAP!

November, 1934

CLASSIFIED ADVERTISING

Classified Advertising—All classified advertisements will be charged for at the rate of ten cents per word, \$2.00 minimum, except those of individuals seeking employment where the rate is five cents per word, \$1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of *Soap*, 136 Liberty St., New York.

Note: All advertisements must be in publisher's hands by the first of the month for that month's issue.

Positions Wanted

Soap Maker and Chemist—Thoroughly experienced and with wide knowledge of the soap business, seeks permanent connection with reliable company. Address Box No. 457, care *Soap*.

Soap Maker—26 years' experience laundry and toilet soaps. Capable of handling any kettle department. Address Box No. 463, care *Soap*.

Chemist—Young man, married, experienced in soap, oil and fat industries. Has had charge of production and laboratory. Knows soap and oil from "A to Z". Address Box No. 464, care *Soap*.

Plant Superintendent—Chemical Engineer has had wide experience in the manufacture and production of boiled and cold made soaps on large scale. Foreign experience. Address Box No. 465, care *Soap*.

Sales Director—Salesman, years of experience in wholesale and retail grocery trade selling cleansers, soaps, disinfectants. Metropolitan territory preferred—with occasional trips to Baltimore, Washington and South. Address Box No. 459, care *Soap*.

Soapmaker—German, reliable, 15 years' experience in soaps, potash and soda; polishes, waxes, etc., wants new connection. Address Box No. 460, care *Soap*.

Soapmaker and Chemist—Thoroughly experienced and familiar with all phases of modern soap manufacture, analytical work, glycerine recovery, oil and fat refining, plant installation, etc., seeks permanent connection with reliable concern in executive capacity. Address Box No. 466, care of *Soap*.

Chemist—German, many years experience in analyzing and research work, wants new connection; any country. Address Box No. 461, care *Soap*.

Superintendent and Soapmaker—Can make and analyze all kinds of soap and soap material. Address Box No. 455, care *Soap*.

In bulk to the trade—

Cleaning Compounds Dishwashing Compounds Soap Powders

Let us quote you on special compounds for your hotel, hospital, institution, etc. trade. Also on your

Oil Soaps

Auto Soaps

Solvent Soaps

Liquid Soaps

Insecticide Soaps

Industrial Soaps

The WARREN SOAP MFG. CO.
INCORPORATED
50 Waverly St., Cambridge, Mass.

*Suppliers of Specialty Soaps to the
Jobbing Trades Since 1868.*

SOAP MACHINERY

Every item shipped from our shops at Newark, N. J., is thoroughly overhauled and rebuilt before shipment.

SPECIALS

- 1—Soap Chip Dryer, 1200 lb.
- 2—Dopp 650 gal. Steam Jacketed Kettles.
- 1—Dopp 1200 lb. Steam Jacketed Crutcher.
- 1—Hershey 1000 lb. Horizontal Jacketed Crutcher.
- 1—1000 lb. All Steel Soap Powder Mixer.
- 2—Holmes & Blanchard 24" and 36" 4 cage Disintegrators, for grinding soap powder—no screens, no plugging.

- 25—Soap Frames, 60"x45½"x14", with trucks.
- 6—Plodders, Houchin, Rutschman, 4", 4½" double screw, 6", 8", 10".
- 14—Filter Presses, 42"x42" to 12"x12".
- 8—Granite Mills, 3 and 4 roll, 12", 18" and 24".
- 15—Horizontal Mixers, Jacketed and Plain, 15 gal. to 1000 gal.

MISCELLANEOUS—Kettles, Mixers, Pony Mixers, Powder Fillers, Tube Fillers, Labelers, Soap Presses, Soap Wrappers, Tanks, Boilers, Pumps, etc.

Send for Latest Bulletin.

CONSOLIDATED PRODUCTS COMPANY, INC.

15-21 Park Row, N. Y. C. **BArclay 7-0600**
We buy your idle Machinery—Single items or entire plants.

Vioflor

A CHEMICALLY SOUND, PERMANENT DEODORIZER

THIS product is a great help to manufacturers of insecticides, naphthas, waxes, polishes, and Paradichlorbenzene blocks.

It saves you 40% to 70% of your perfuming cost without changing the odor effect you now have in your product.

It takes only a few minutes to demonstrate this.

On every thousand dollars you now pay out for perfuming ingredients why not save \$400.00 to \$700.00?

Manufactured by

CREPIN & DOUMIN, Ltd., London, England

Sold in the United States and Canada by

JOHN POWELL & CO., Inc.

114 East 32nd Street :: New York, N. Y.

We Manufacture
For The Trade ONLY

Liquid Soap Base

Auto Soaps

Potash Oil Soap

Shampoo

U.S.P. Cresol Compound

Coal Tar Disinfectants

Liquid Soap

Pine Oil Soap

U.S.P. Green Soap

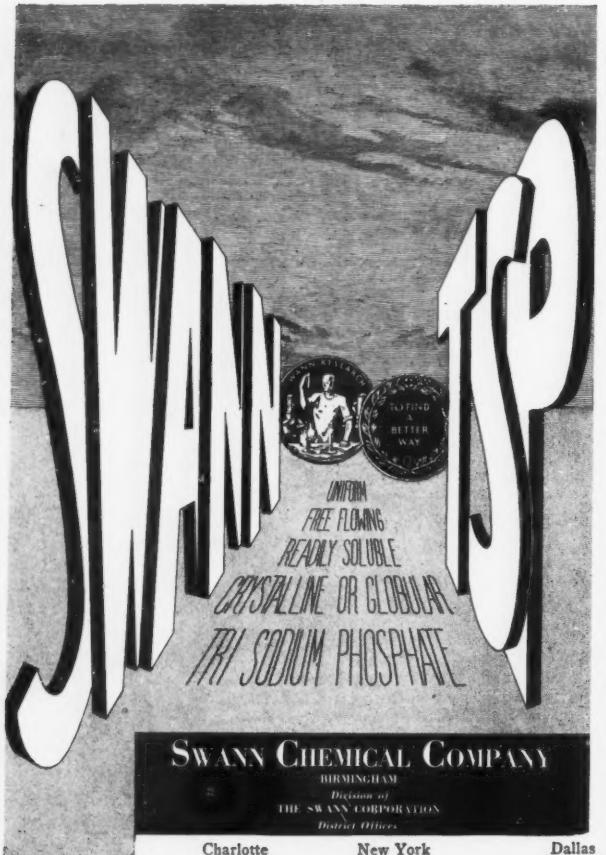
Shampoo Base

Pine Oil Disinfectants

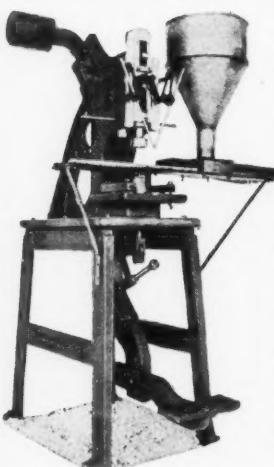
Insecticides

Ask for samples of these specialty bulk products

HARLEY SOAP CO.
2852 E. Pacific St. Philadelphia



**Machine-Made
DEODORANT
CAKES and BLOCKS
are big sellers!**



HOUCHIN MACHINERY CO., INC.
HAWTHORNE, N. J.

Make your deodorant and moth cakes with this heavy pressure foot press by the cold process and save money while you are increasing sales. A smooth, even cake will sell better because of its improved appearance and will cost less to make because this press not only cuts labor but saves 5% of your raw material. Why not let us make some sample cakes with your own para, naphthalene, etc., and submit complete information regarding cost and manufacturing process?

Young man, 30, wants position with opportunity to develop his abilities. Knows advertising, sales promotion; energetic, aggressive, sound business background. Address Box No. 454, care *Soap*.

Wanted—Established sales agent in Mexico desires to represent American manufacturer on commission basis. Covers Mexico and other parts of Central America. Knows the buyers of chemicals, soap raw materials, insecticide materials, perfume products, etc. References furnished. Correspondence in English or Spanish. Address Box No. 446 care *Soap*.

Salesman—Man with number of years experience and many contacts among wholesale grocery, drug and chain stores in New York and nearby territory, desires to represent out-of-town manufacturer in this territory on cleansers, soap powders, toilet and laundry soaps. Address Box No. 426, care *Soap*.

Technical Chemist—specialist in all kinds of soaps, cosmetics, perfumes, cottonseed and olive oil, shoe polishes, etc., seeks executive post in Latin America. Perfect Spanish, 7 years experience Germany,—7 years South America. Now located in Latin America. Address Box No. 440, care *Soap*.

Insecticides—plant superintendent and chemist who has had twenty years' experience in manufacturing insecticides and ten years' experience with biological and chemical control of leading fly spray manufacturer, seeks new connection. Highest references. Address Box No. 443, care *Soap*.

POSITIONS OPEN

Wanted—Alert young man to sell a well-known line of disinfectants, liquid soaps, deodorizing cakes, shampoo bases, etc. Address Box No. 462, care *Soap*.

Sales Organization with 900 active beauty shop accounts in Metropolitan district; would make exclusive arrangements with experienced soap maker or chemist with capital for small shampoo plant; profit-sharing basis. We would pay cash and require no credit or financing. Box No. 458, care *Soap*.

Eastern manufacturer desires industrial chemist thoroughly experienced in manufacturing soaps, disinfectants, polishes, waxes. State experience, age, salary expected. Address Box No. 414, care *Soap*.

STEEL DRUMS

That are built to last!



30-55-110 gal. sizes

The BEST
Containers for
LIQUID SOAPS
DISINFECTANTS
CLEANSERS
ESSENTIAL
OILS
VEGETABLE
OILS
CHEMICALS
GLYCERIN
ETC.

*Black, Galvanized,
Tinned*

Sturdy and long lasting, the Trageser heavy duty steel drum will be carrying your materials to market long after cheap containers have found the junk pile. Order a sample drum.

**JOHN TRAGESER STEAM COPPER WORKS
GRAND STREET
MASPETH, L. I., N. Y.**

Special tanks, tubs, pails, etc.

The NEW HASKINS *utility CAPPER*

**90 CAPS
PER MINUTE**
**ANY SHAPE • STYLE
OR SIZE UP TO 54 mm.**

**UNIFORM
TIGHTNESS**
•
LESS BREAKAGE
•
NO LEAKAGE

Installed on liberal trial basis. Out-performs larger and more costly machines. Equally efficient for bottles, jars and metal cans. Mountings available for conveyor and bench installation. Also adaptor for ceiling suspension. Write, without obligation, for descriptive literature and details of unusual demonstration offer.



R. G. HASKINS COMPANY
4642 WEST FULTON STREET • CHICAGO

F. & S.
Quality Colors
for
TOILET SOAPS
LIQUID SOAPS
TOILET PREPARATIONS

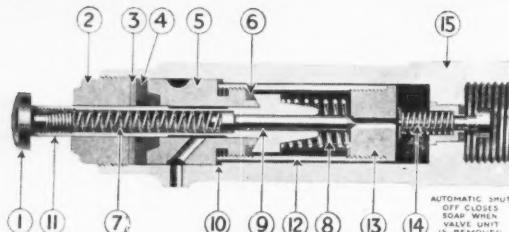
Long experience enables us to produce colors for all types of soaps.

If you have a shade you want matched send us a sample. We have complete facilities for matching.

Liquid soap colors a specialty—send for samples of F. & S. greens and ambers.

FEZANDIE & SPERRLE, Inc.
205 FULTON STREET
NEW YORK, N. Y.
Import—Manufacture—Export

PALMER SOAP VALVES



All parts of Palmer Valve Units are replaceable—for repairs or cleaning—all screwed together—no special tools needed. Palmer valves give long service— withstand highest pressures—conserve soap—prevent wasteful continuous flow of soap when valves are being operated. Equipped with automatic shut-off (optional) which permits valve removal for cleaning or repairs, yet automatically prevents flow of soap at unit without interfering with other valves on system. Study construction above.

Palmer
PRODUCTS INC.
WAUKESHA, WIS.
Adjacent to Milwaukee

We manufacture a complete line of janitor and sanitary supplies, including soap dispensing equipment of all kinds. Write for complete literature.

PYLA-ODORS

COLOR AND PERFUME
IN A SINGLE OPERATION

BATH SALTS
LIQUID SOAPS
PARA BLOCKS
NAPHTHALENE

FAST COLORS
LASTING ODORS
MODERATE PRICES

PYRAM PRODUCTS CO., Inc.

Mfg. Chemists, Importers, Exporters
799 GREENWICH STREET, NEW YORK CITY
CABLE ADDRESS PYLAMCO

Custom Milling of DERRIS

In response to numerous requests, we have decided to place our experience and part of our milling equipment at the disposal of importers and others who wish to have Derris and other Rotenone bearing roots expertly milled at reasonable cost.

Our service includes transporting the raw material from the steamship pier, reducing it to an air-floated powder, barreling it and delivering it to the carrier designated by you. Every lot is carefully analyzed after milling by the Jones' Method to determine its Rotenone content as well as the total extractives.

We are also equipped to mill and/or otherwise process a wide variety of botanicals, crude drugs, gums, etc., under strict laboratory control. We solicit your inquiries.

CYRUS WARD & COMPANY, Inc.

Custom Milling Division
305-309 EAST 47th STREET
NEW YORK CITY

Miscellaneous

For Sale—1 Proctor 36 in. Roll Cooler and Crusher. Originally cost \$3,500.00; 1 Proctor & Schwartz Automatic 4-fan Soap Chip Dryer, Serial No. 217. Originally cost approximately \$6,000.00. Both pieces of equipment in first class condition and being operated regularly. Address Box No. 456, care *Soap*.

Machinery Wanted—Crude glycerine evaporator in good condition at an attractive price. Address Box No. 413, care *Soap*.

For Sale—Soap factory in first class condition, and large warehouse on Pennsylvania and the Reading Railroads, near Philadelphia. Sacrifice on account of ill health. Address Box No. 452, care *Soap*.

Must Sell at once—sacrifice—1 Soap Cutting Table; 1 Day Dough Mixer (1½ Barrel); 1 Jeweler's Foot Press (Cassel Mach. Co.)—excellent condition. Address Box No. 453, care *Soap*.

STATEMENT OF OWNERSHIP

Statement of the owners'p, management, circulation, etc., required by the Act of Congress of March 3, 1933, of *Soap*, published monthly at New York, N. Y., for October 1, 1934.

State of New York, County of New York.

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Grant A. Dorland, who, having been duly sworn according to law, deposes and says that he is the Business Manager of *Soap* and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, MacNair-Dorland Company, Inc., 136 Liberty St., N. Y. C.; Editor, Ira P. MacNair, 136 Liberty St., N. Y. C.; Managing Editor, None; Business Manager, Grant A. Dorland, 136 Liberty St., N. Y. C.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

MacNair-Dorland Co., Inc., 136 Liberty St., N. Y. C.; Ira P. MacNair, 136 Liberty St., N. Y. C.; Grant A. Dorland, 136 Liberty St., N. Y. C.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustee, hold stock and securities in a capacity other than that of a bona fide owner; and that this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stocks, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the months preceding the date shown above is _____. (This information is required from daily publications only.)

GRANT A. DORLAND,
Business Manager.

Sworn to and subscribed before me this 20th day of September, 1934.
Elfrieda M. Christensen, Notary Public, Richmond County. Certif. filed in N. Y. County, N. Y. County No. 646. Reg. No. 6-C-354. Commission expires March 30th, 1936.

II NEW AND REBUILT SOAP MACHINERY

We offer to the trade our NEW IMPROVED 600 and 1,200 lb. FRAMES, SLABBERS, CUTTING TABLES, FOOT PRESSES, etc. Send for details.

1—Automatic Power Cutting Table
2—Brougnaon Mixers, jacketed.
1—10A Blanchard Mill
3—Soap Presses, Foot and Power
6—Filter Presses, sizes 6" to 36"
6—Granite Stone Mills, 2, 3, and 4 rolls
1—Proctor Soap Chip Dryer, complete
1—Automatic Power Soap Press
4—Steel, 3 and 5-roll Mills
1—Jacketed Vertical Crutcher
2—1,500 lb. Horizontal Crutchers
1—Hand Power Slabber.
1—Hand Power Cutting Table.
1—Houchin Chipper, Belt Drive
600 and 1,200 lb. Frames, Kettles, Pumps, Tanks, Filter Presses, Wrapping Machines, Tube Fillers, Closers, Crimpers, Dry Powder Mixers, Pulverizers, Grinders, Amalgamators, Mixers, etc.

*Send for Complete List (Bulletin No. 15)
WE BUY AND SELL FROM SINGLE ITEMS TO
COMPLETE PLANTS.*

STEIN-BRILL CORPORATION

183 VARICK STREET

NEW YORK, N. Y.

Phone:
WALKER 5-6892-3-4

Cable Address:
"BRISTEN"

COLORS

FAST GREEN FOR SOAP

FAST TO SOAP BY ANY PROCESS

Boiled

Half Boiled

Cold

Transparent or

Liquid

Proved for thirty years

W 710 BLUISH GREEN

W 709 OLIVE GREEN

A. C. DRURY & CO., INC.

International Merchants

Essential Oils—Waxes—Talc—Clay—Colors—Zinc Oxide, etc.

219 EAST NORTH WATER ST.

CHICAGO

Where to buy

RAW MATERIALS AND EQUIPMENT

for the Manufacture of Soaps and Sanitary Products

NOTE: This is a classified list of the companies which advertise regularly in SOAP. It will aid you in locating advertisements of raw materials, bulk and private brand products, equipment, packaging materials, etc., in which you are particularly interested. Refer to the Index to Advertisements, on page 118, for page numbers. "Say you saw it in SOAP."

ALKALIES

American Cyanamid & Chemical Corp.
Columbia Alkali Co.
Dow Chemical Co.
Hooker Electrochemical Co.
Niagara Alkali Co.
Solvay Sales Corp.
Stauffer Chemical Co.
Jos. Turner & Co.
Warner Chemical Co.
Welch, Holme & Clark Co.

Dow Chemical Co.
E. I. du Pont de Nemours & Co.
General Chemical Co.
Grasselli Chemical Co.
Hooker Electrochemical Co.
Industrial Chemical Sales Co.
Mechling Bros. Chemical Co.
Merck & Co.
Monsanto Chemical Co.
Niagara Alkali Co.
Philadelphia Quartz Co.
Solvay Sales Corp.
Standard Silicate Co.
Stauffer Chemical Co.
Swann Chemical Co.
Jos. Turner & Co.
Victor Chemical Works
Warner Chemical Co.
Welch, Holme & Clark Co.

AROMATIC CHEMICALS

Budd Aromatic Chemical Co.
Compagnie Parente
Dodge & Olcott Co.
Dow Chemical Co.
P. R. Dreyer, Inc.
A. C. Drury & Co.
E. I. du Pont de Nemours & Co.
Felton Chemical Co.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Merck & Co.
Monsanto Chemical Co.
Naugatuck Chemical Co.
Polak's Frutal Works
Solvay Sales Corp.
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

COAL TAR RAW MATERIALS

(Cresylic Acid, Tar Acid Oil, etc.)
American Cyanamid & Chemical Corp.
Baird & McGuire, Inc.
Barrett Co.
Koppers Products Co.
Monsanto Chemical Co.
Reilly Tar & Chemical Co.
White Tar Co.

CONTAINERS

Continental Can Co. (Tin Cans)
Garnet Chemical Corp. (Drip Machines)
Maryland Glass Corp. (Bottles)
Metal Package Corp. (Tin Cans)
Owens-Illinois Glass Co. (Bottles)

DEODORIZING BLOCK HOLDERS

Clifton Chemical Co.
Eagle Soap Corp.
Garnet Chemical Corp.
Fuld Bros.
Palmer Products, Inc.

ESSENTIAL OILS

Budd Aromatic Chemical Co.
Compagnie Parente
Dodge & Olcott Co.
P. R. Dreyer Inc.
A. C. Drury & Co.
Fritzsche Brothers, Inc.
Leghorn Trading Co.
Magnus, Mabee & Reynard, Inc.
Polak's Frutal Works
A. M. Todd Co.
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

(Continued on Page 116)

BULK AND PRIVATE BRAND PRODUCTS

An-Fo Manufacturing Co.
Baird & McGuire, Inc.
Clifton Chemical Co.
Davies-Young Soap Co.
Eagle Soap Corp.
Federal Varnish Co.
Fuld Bros.
Harley Soap Co.
Hysan Products Co.
Hull Co.
Kemiko Mfg. Co.
Koppers Products Co.
Kranich Soap Co.
New York Soap Corp.
Palmer Products
Philadelphia Quartz Co.
John Powell & Co.
Geo. A. Schmidt & Co.
Warren Soap Mfg. Co.
White Tar Co.
Windsor Wax Co.

CHEMICALS

American Cyanamid & Chemical Corp.
Bowker Chemical Co.
Columbia Alkali Co.

RAW MATERIAL AND EQUIPMENT GUIDE

(Continued from page 114)

NOTE: This is a classified list of the companies which advertise regularly in SOAP. It will aid you in locating advertisements of raw materials, bulk and private brand products, equipment, packaging materials, etc., in which you are particularly interested. Refer to the Index to Advertisements, on page 118, for page numbers. "Say you saw it in SOAP."

MACHINERY

Blanchard Machine Co. (Soap Powder)
Anthony J. Fries (Soap Dies)
R. G. Haskins Co. (Capping Machinery)
Houchin Machinery Co. (Soap Machinery)
Huber Machine Co. (Soap Machinery)
R. A. Jones & Co. (Automatic Soap Presses
and Cartoning Machinery)
Proctor & Schwartz (Dryers)
C. G. Sargent's Sons Corp. (Dryers)
Stokes & Smith Co. (Packing Machinery)
Triangle Package Machinery Co. (Packaging
Machinery)

MACHINERY, USED

Consolidated Products Co.
Newman Tallow & Soap Machinery Co.
Stein-Brill Co.

METAL CAPS

Anchor Cap & Closure Corp.
Ferdinand Gutmann & Co.

MISCELLANEOUS

Dobbins Mfg. Co. (Pails, Mop Wringers, etc.)
General Naval Stores Co. (Pine Oil-Rosin)
Hercules Powder Co. (Pine Oil and Rosin)
Industrial Chemical Sales Co. (Decol. carbon, Chalk)
Pylam Products Co. (Lathering Agent)
Rohm & Haas Co. (Insecticide Base)
Universal Chemical Co. (Liquid Wax Base)

OILS AND FATS

Industrial Chemical Sales Co.
Leghorn Trading Co.
Newman Tallow & Soap Machinery Co.
Theobald Annual By-Products Refinery
Welch, Holme & Clark Co.

PARADICHLORBENZENE

Dow Chemical Co.
E. I. du Pont de Nemours & Co.
Hooker Electrochemical Co.
Merck & Co.
Monsanto Chemical Co.
Niagara Alkali Co.
Solvay Sales Corp.
Jos. Turner & Co.

PERFUMING COMPOUNDS

Budd Aromatic Chemical Co.
Compagnie Parente
Dodge & Olcott Co.
P. R. Dreyer, Inc.
A. C. Drury & Co.
Felton Chemical Corp.
Fritzsche Brothers, Inc.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Polak's Frutal Works
Ungerer & Co.
Van Ameringen-Haebler, Inc.
Albert Verley, Inc.

PETROLEUM PRODUCTS

Anderson-Pritchard Oil Corp.
Atlantic Refining Co.
Sherwood Petroleum Co.
L. Sonneborn Sons.

PYRETHRUM AND DERRIS PRODUCTS

Insect Flowers and Powder, Pyrethrum Extract, Derris
Products
An-Fo Mfg. Co. (Extract)
W. Benkert & Co.
McCormick & Co.
McLaughlin, Gormley, King Co.
John Powell & Co.
Sherwood Petroleum Co.
Cyrus Ward & Co.

SOAP COLORS

A. C. Drury & Co.
Fezandie & Sperrle
Interstate Color Co.
Pylam Products Co.

SOAP DISPENSERS

Clifton Chemical Co.
Eagle Soap Corp.
Fuld Bros.
Garnet Chemical Corp.
Palmer Products

SODIUM SILICATE

American Cyanamid & Chemicals Corp.
General Chemical Co.
Grasselli Chemical Co.
Mechling Bros. Chemical Co.
Philadelphia Quartz Co.
Standard Silicate Co.

SPRAYERS

Breuer Electric Mfg. Co.
Dobbins Mfg. Co.
Hudson Mfg. Co.
Lowell Sprayer Co.

STEEL CONTAINERS

John Trageser Steam Copper Works (Pails and
Drums)
Wilson & Bennett Mfg. Co. (Pails and Drums)

TRI SODIUM PHOSPHATE

American Cyanamid & Chemicals Corp.
Bowker Chemical Co.
General Chemical Co.
Grasselli Chemical Co.
Swann Chemical Co.
Victor Chemical Works
Warner Chemical Co.

NEW IDEAS · INFORMATION

SOAP TRADE REVIEW

NOW more than ever, it is necessary to keep in touch with trade developments in all parts of the world. THE SOAP TRADE REVIEW is the only monthly dealing exclusively with the Soap, Perfumery and Cosmetic Industries in Great Britain. It contains authoritative articles and the latest news and information of interest to those engaged in these industries.

Specimen copy posted free.
Subscription rate 12/6 per annum.

THE SOAP TRADE REVIEW
102-5 SHOE LANE, FLEET STREET
LONDON, E. C. 4



BACK COPIES of "SOAP"

DO you need any back copies of SOAP to complete your files? If they are not all there the very issue you may want to refer to later on may be missing and may also be unavailable in our office. Check up now! If you need any we can supply some issues at a charge of fifty cents per copy. We don't have anywhere near all of them ourselves, excepting in a single set of bound volumes which cannot be taken out of the office.

Speaking of bound volumes reminds us that we have for sale one or two sets of all excepting three years. They cost ten dollars each—twelve issues of SOAP handsomely and permanently bound in blue cloth covered card board and stamped in gold. These bound volumes represent a truly worth while addition to any technical library.

THE SNELL ALKALI TESTER

*for plant control
of free alkali in
soaps of all types*

With this new alkali tester, you can easily control free alkali in liquid, solid or chip soaps. Procedure is very easy to follow and equipment is quite inexpensive. We will gladly supply complete information on request.

THE HULL CO.

305 Washington Street, Brooklyn

INDEX TO ADVERTISERS

For product classification see pages 114 and 116

* For Further details see announcement in 1934 SOAP BLUE BOOK.

*American Cyanamid & Chemical Corp.....	24	*Leghorn Trading Co.	October
Anchor Cap & Closure Corp.	88	Lord Baltimore Hotel.....	October
Anderson-Prichard Oil Corp.	76	Lowell Sprayer Co.	October
An-Fo Manufacturing Co.	106		
Atlantic Refining Co.	107		
*Baird & McGuire, Inc.	75, 78	Magnus, Mabee & Reynard, Inc.	104
*Barrett Co.	103	Manufacturing Chemist August	
*W. Benkert & Co.	84	Maryland Glass Corp.	October
Blanchard Machine Co.	62	*McCormick & Co.	Back Cover
Books	64	McLaughlin Gormley King Co.	70, 71
*Bowker Chemical Co.	119	Mechling Bros. Chemical Co.	119
*Breuer Electric Mfg. Co.	100	Merck & Co.	6
*Budd Aromatic Chemical Co.	106	Metal Package Corp.	9
Chemical Supply Co.	102	Monsanto Chemical Co.	3
*Clifton Chemical Co.	7		
*Columbia Alkali Co.	20	Naugatuck Chemical Co.	34
Compagnie Parente	120	*Newman Tallow & Soap Machinery Co.	108
*Consolidated Products Co.	109	New York Soap Corp.	50
*Continental Can Co.	68	*Niagara Alkali Co.	12
*Davies-Young Soap Co.	11	Owens-Illinois Glass Co. September	
Dobbins Mfg. Co.	102	Palmer Products	112
Dodge & Olcott Co.	October	Pease Laboratories	115
*Dow Chemical Co.	98	Philadelphia Quartz Co.	60
*P. R. Dreyer, Inc.	94	Polaks Frutal Works	46
*A. C. Drury & Co.	113	*John Powell & Co.	67, 110
*E. I. duPont de Nemours & Co.	October	*Proctor & Schwartz, Inc.	62
Eagle Soap Corp.	2nd Cover	Pylam Products Co.	112
Electro Bleaching Gas Co.	12		
Entomological Testing Laboratories....	115	Reilly Tar & Chemical Co.	101
Federal Varnish Co.	99	Rohm & Haas Co.	96
Felton Chemical Co.	13, 77	Roney Plaza Hotel	40
Fezandie & Sperrle	112	Lester L. Sargent	115
Anthony J. Fries	October	*C. G. Sargent's Sons Corp. October	
Fritzsche Brothers, Inc.	30	Geo. A. Schmidt & Co.	120
Fuld Brothers	66	Seil, Putt & Rusby	115
Garnet Chemical Corp.	October	Sherwood Petroleum Co.	104
*General Chemical Co.	73	Skinner & Sherman	115
General Naval Stores Co.	90	Foster D. Snell	115
*Givaudan-Delawanna, Inc.	3rd Cover, 72	Soap Trade & Perfumery Review....	117
Grasselli Chemical Co.	8	*Solvay Sales Corp.	52
Ferdinand Gutmann & Co.	119	*L. Sonneborn Sons	92
Lloyd A. Hall	115	Standard Silicate Co.	October
Harley Soap Co.	110	Stauffer Chemical Co.	53
R. G. Haskins Co.	111	Stein-Brill Corp.	113
Hercules Powder Co.	69	Stillwell & Gladding	115
*Hoover Electrochemical Co.	September	*Stokes & Smith Co.	October
Houchin Machinery Co.	58, 110	*Swann Chemical Co.	110
Huber Machine Co.	119	Theobald Animal By-Products Refinery....	48
Hudson Mfg. Co.	105	A. M. Todd Co.	October
The Hull Co.	117	John Trageser Steam Copper Works	111
Hysan Products Co.	97	Triangle Package Machinery Co. August	
Illinois Chemical Labs.	115	Jos. Turner & Co.	42
Industrial Chemical Sales Co.	54	Ungerer & Co.	Front Cover
Interstate Color Co.	October	Universal Chemical Co.	120
R. A. Jones & Co.	14		
Kemiko Mfg. Co.	October	*Van Ameringen-Haebler, Inc.	36
*Koppers Products Co.	100	Albert Verley, Inc.	4
Kranich Soap Co.	52	*Victor Chemical Works.	42
		Cyrus Ward & Co.	112
		*Warner Chemical Co.	48
		Warren Soap Mfg. Co.	109
		*Welch, Holme & Clark Co.	46
		*White Tar Co.	106
		Wilson & Bennett Mfg. Co.	10
		Windsor Wax Co.	120

Every effort is made to keep this index free of errors, but no responsibility is assumed for any omission.

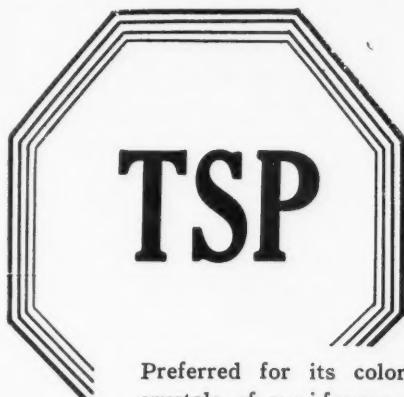
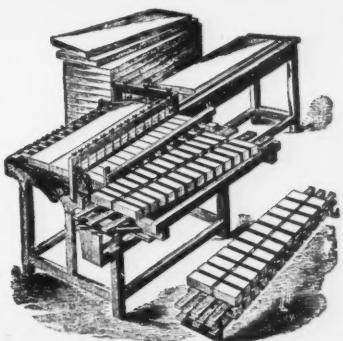


Soap Cutting Devices

Perhaps a little homely—but effective nevertheless. Six full sized soap frames per hour is quite an easy performance with these two devices, something like 10,000 cakes, laundry size.

A full line of soap machinery—hand or power—available. Forty years' experience making dependable soap machinery.

HUBER MACHINE CO.
259—46th STREET BROOKLYN, N. Y.



Preferred for its colorless crystals of uniform size and sparkling appearance. Prompt deliveries made from convenient distributing points. Packed in 325-pound paper lined barrels. Also in kegs and bags.

BOWKER
CHEMICAL COMPANY
50 Church St. New York
BRANCHES
Baltimore, Md. Chicago, Ill.

"FILMA-SEAL"

(the double seal of cap and film)

Do you have any sealing problem in your packaging?

We are prepared to prove that the GUTMANN C. T. Cap and "FILMA-SEAL" either in the clear FILM or Type J, (TAMPER-PROOF SEAL) is not only the solution of your problems but the most hermetic seal in your experience.

Prevents Leakage and Evaporation
Is a GUARD against COUNTERFEITING

Cap may be printed with a warning to purchaser not to accept if inner seal is broken or tampered with,

Used on many Nationally known
advertised products

FERDINAND GUTMANN & CO.
BROOKLYN, N. Y.

Established 1890
U. S. Patent & Pats. Pending—Trade Marks Reg.

MECHLING

PHILADELPHIA
CAMDEN, N. J.
BOSTON, MASS.

MECHLING BROS. CHEMICAL COMPANY

EST.



1869

MECHLING
BROS. CHEMICAL COMPANY

Do You Know?

How easily you can produce your own high-grade

RUBLESS FLOOR WAX

at a cost of less than 35c per gallon, using—

CARNAU WAX

a processed, self-emulsifying Carnauba Wax.

No elaborate machinery or technical knowledge required to produce bright and durable rubless waxes ranking better in quality than competitive finished products of a much higher price.

UNIVERSAL CHEMICAL COMPANY

Established 1921

2344 PENNSYLVANIA AVE.

BALTIMORE, MD.

C R Y S - T I N T S

PERFUME and color Para
Blocks and Crystals, Bath
Salts and Moth Balls in one
operation.

The use of Crys-Tints eliminates doubtful results for they provide uniform distribution of Odor and Color and are extremely lasting and stable.

Orange Blossom	Narcisse	Violet
New Mown Hay	Wisteria	Lilac
Carnation	Oriental	Rose
Lavender	Jasmin	Pine

8 OUNCES TO 100 LBS., RECOMMENDED

\$1.50 per Lb.
Double Strength, \$2.00 per Lb.
Series D—Uncolored, \$.50 per Lb.
Series E—Uncolored, \$1.00 per Lb.

Compagnie Parento, Inc.

CROTON-ON-HUDSON, N.Y.
NEW YORK CITY

TORONTO

SHAVING CREAM

TOOTH PASTE

In
Bulk
Or

Under Your Own Name in our
special tubes and cartons. These
are lithographed with a blank space
for YOUR label. In any quantity
from one gross up.

GEO. A. SCHMIDT CO.

Manufacturers of *SOAP* of Every Description

236-238 West North Avenue.
Chicago.



We manufacture a complete line
of high quality waxes for the job-
bing trade, including no-rub liquid
wax, regular type liquid wax, pow-
dered wax, paste wax and also
furniture polish. These products
can be supplied in bulk, packaged
under the Windsor label or with
your own label which we supply.

WINDSOR
WAX COMPANY
50 Church St. New York N.Y.

factory
611 Newark St. Hoboken N.J.

Manufacturers of
WAX PRODUCTS EXCLUSIVELY



**YOU CAN SAVE MONEY TWO WAYS
BY USING**

Citrene

INSTEAD OF CITRONELLA!

Because the price of CITRENE is consistently under that of Citronella, and because CITRENE has a stronger, more refined odor, you can make a double saving: YOU CAN USE LESS AND IT COSTS LESS!

These are the reasons why CITRENE is replacing the natural Citronella Oils to a greater and greater extent. And the advantages of using CITRENE are still greater when you consider that the price is stable, having changed but once in more than three years—and then only slightly.

Remember, CITRENE is both low priced and potent! A very small quantity completely eliminates fatty odors in soaps and polishes, unpleasant smells in sprays and insecticides. Write today for free sample of CITRENE.

The continued shortage of Brown Camphor Oil has caused many users of Sassafras products to substitute CITRENE. Perhaps you should consider such a change at this time. You will find that it pays to use CITRENE. You are always assured of a supply and a stable price. Let us send you a free sample of CITRENE today.

**GIVAUDAN
DELAWANNA INC.
80 Fifth Avenue, New York, N.Y.**

BRANCHES: Philadelphia, Los Angeles, Atlanta, Cincinnati, Detroit, Dallas, Baltimore, New Orleans, Chicago, San Francisco, Montreal, Havana.



DEATH DEALING UNIFORMITY

Other McCormick Standardized Pyrethrum and Derris Products

PYRETHRUM POWDER: Finest available with a known high pyrethrum content. Milled with modern equipment which makes heat accumulation impossible. So extremely fine that it remains suspended in air longer. More effective and economical because it comes into more intimate contact with vital parts of insect's body.

DERRIS EXTRACT: Containing 5.0 grams of rotenone per 100 c. c. plus the other toxic derivatives of derris root.

DERRIS RESINATE: Containing 25% rotenone and 75% active resins.

ROTENONE CRYSTALS: As Solvate, 71% rotenone—C. P. and technical grades.

DERRIS POWDER: Finest powder in the world. Standardized at 4% and 5% rotenone. Suitable for use in aqueous sprays. Will not clog spray nozzles.

... that's what builds insecticide sales

DEADLINESS. Maximum deadliness. Uniform deadliness. That's what it takes to make customers buy your insecticide again and again and again. And that's what you get in **McCORMICK'S PYRETHROL 20**.

PYRETHROL 20 is a superior pyrethrum concentrate. Containing not less than 2.15 grams of pyrethrins per 100 c.c. Controlled by chemical assay. Checked by actual spraying on household insects. Made with a petroleum oil refined to complete freedom from kerosene odor.

Build repeat sales with an insecticide of death-dealing uniformity. Write to McCormick & Co., Baltimore, Md., for further information about **PYRETHROL 20**—now.

McCormick's **PYRETHROL 20**

